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“The Pelagic Issue”

Part 1

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MARYLAND ORNITHOLOGICAL SOCIETY, INC.

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Cover: Participants aboard the *Thelma Dale IV* on the *See Life Paulagics* 28 August 2004 pelagic trip to Maryland waters, sailing out of Lewes, Sussex County, Delaware. Photographed by George Jett©.

Editor's Note

Welcome to the spring 2018 issue of *Maryland Birdlife*. The journal received such a large response to the request for pelagic articles, that both the spring and fall 2018 issues will be devoted to pelagic birds and birding.

Spring 2018: *The Pelagic Issue*, Part 1

Maryland has a rich pelagic history. Maryland's most renowned pelagic pioneer was Richard A. Rowlett. His accomplishments are detailed by Phil Davis, and Rich is presented with the first Maryland/District of Columbia Records Committee Field Excellence Award. Jay Sheppard reports on open ocean roosting by Snow Geese. Paul Guris documents Maryland's first Trindade Petrel, and Matt Hafner and Mikey Lutmerding do likewise for Maryland's first Masked Booby. Paul O'Brien tackles the intricacies of the Band-rumped Storm-Petrel complex in Maryland. In addition to the pelagic-oriented articles, Marilyn Veek summarizes the 2017 Maryland May Count, and Chuck Stirrat summarizes the 2017 Maryland Fall Count. Diane Ford's marvelous artwork rounds out this issue.

Fall 2018: *The Pelagic Issue*, Part 2

Phil Davis conducts a historical survey of pelagic records from the Royal Navy Birdwatching Society. Gene Scarpulla summarizes his two years of running pelagic trips out of Ocean City, Maryland. Jan Reese and Jeff Sullivan document published pelagic species reports in the Chesapeake Bay and its tributaries.

Both 2018 issues highlight the diversity of seabirds and seabirding opportunities in Maryland. So, get out and go seabirding! See *Life Paulagics* routinely runs pelagic trips to Maryland waters. For additional information about these trips, visit <http://paulagics.com/>. See you on the High Seas!

Eugene J. Scarpulla
Editor
ejscarp@comcast.net

P.S.: Do you have a potential article or note for *Maryland Birdlife*, but are apprehensive about submitting it? If so, please contact me and I can easily work with you and walk you through the process.

P.S.S.: *Maryland Birdlife* is always looking for artists who would like to have their artwork featured in the journal. Please contact me if you might be interested in showcasing your artwork.

**The Maryland/District of Columbia Records Committee Presents the First
Richard A. Rowlett Field Excellence Award
to Richard A. Rowlett**

Phillip C. Davis

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[Editor's note: This article is a shortened summary of a much, much larger document. The full document can be found on the Maryland/District of Columbia Records Committee blog at <https://tinyurl.com/RARowlett>.]

Abstract: This article documents the genesis and first issuance of an award by the Maryland/District of Columbia Records Committee (MD/DCRC) to recognize and express deep appreciation for regional field work and documentation, by a Maryland/District of Columbia field birder. This first award is presented to Richard A. Rowlett, for whom the award will be permanently named. Rowlett's bird-related history, his records, publications, and accomplishments while in the Middle Atlantic region are compiled and chronicled. Also summarized are Rowlett's ornithological experiences before he moved to the Maryland area and his ensuing ornithological career after leaving Maryland. Rowlett's ornithological observations and publications were extensive; this paper compiles references from many varied sources and integrates them into this compendium.

BACKGROUND

The Maryland/District of Columbia Records Committee (MD/DCRC) is a standing committee of the Maryland Ornithological Society (MOS). The *Birds of Maryland and the District of Columbia* (Stewart and Robbins 1958) was used as a baseline document for rare and unusual species. In the period between 1958 and 1982 the responsibility to approve and publish rarity records fell on the editors of the regional seasonal reports in MOS's *Maryland Birdlife*, the Audubon Naturalist Society's *Atlantic Naturalist*, and the National Audubon Society's *American Birds*. After the MD/DCRC was established, the committee began to identify and conduct reviews of "historical" observational reports to include the pre-1983 period.

THE MOS MD/DCRC FIELD EXCELLENCE AWARD

Historical Perspective

Numerous field birders have contributed to the observation and identification of rare and unusual avian species in Maryland and the District of Columbia since regional ornithological records were first documented. Notable in the very early history of Maryland and the District of Columbia records, beginning with John James Audubon, and continuing to the era of Robert E. Stewart and Chandler S. Robbins, were individuals such as Elliot Coues, Robert Ridgway, Frank Kirkwood, Hervey Brackbill, and many others. From the time of the publication of Stewart and Robbins (1958) to the present, hundreds of field birders have provided invaluable support to the mission of the MD/DCRC by describing, photographing, and collecting rare and unusual taxa in our region; however, a small number of these observers are especially notable for the quality and quantity of the documentation they ultimately provided to the committee and for their documented observations and educational activities to further our understanding the avifauna of our region. These people deserve special recognition.

Purpose

The purpose of the MD/DCRC Field Excellence Award is to publicly acknowledge and extend the appreciation of the MOS and the MD/DCRC to birders who have materially and significantly supported furtherance of the MD/DCRC mission by documenting rare and unusual taxa. The documentation considered include photographs and written submissions directly to the MD/DCRC and articles published in *Maryland Birdlife* and other regional ornithological journals. Additional criteria include community education and State-wide contributions. A secondary objective of this award is to encourage similar levels of support from current and emerging birders.

This award is envisioned to be issued only occasionally. This award can recognize active birders as well as those who are no longer active in the field and the award may be issued posthumously.

Process

Candidates may be nominated by the members of the MD/DCRC prior to an MD/DCRC Annual Meeting. If multiple candidates are nominated, the committee will select only a single recipient. Selectees must receive at least two-thirds of the votes of eligible voting committee members at an MD/DCRC Annual Meeting. The committee will attempt to present the award at the next MOS Conference, MOS Board of Directors meeting, or a local MOS chapter meeting.

Award Name

The permanent name of this award will be taken from the first recipient. This award is now perpetually named the “Richard A. Rowlett Maryland Ornithological Society - Maryland/District of Columbia Records Committee Field Excellence Award.”

THE FIRST AWARDEE (2018): RICHARD A. ROWLETT

The committee is pleased to announce that the initial awardee of the Maryland Ornithological Society - Maryland/District of Columbia Records Committee Field Excellence Award is Richard A. Rowlett (Figure 1). Unless actively birding in the region in the 1970s, few current MOS birders will personally know “Rich” and many others will probably not even know of him since he moved from our area in 1980; however, Rowlett had a profound impact on the knowledge of the avifauna of Maryland and the entire Middle Atlantic region. Rowlett was an extremely avid and productive birder who searched out and documented rarities, both in writing and photographically, and published his findings. Although primarily well-known for his pioneering seabird-related activities, he was also an avid land birder throughout Maryland and the Mid-Atlantic region. There was not a Maryland records committee in the 1970s therefore, Rowlett never interfaced directly with the MD/DCRC until afterwards. However, Rowlett contributed many key regional records and published many articles in *Maryland Birdlife* and other regional journals. Some of his not previously published documentation was subsequently acquired and reviewed by the MD/DCRC in the late 1990s. Although living out-of-state in the 1990s, at the committee’s request, he kindly searched his personal archives, located, and provided many unpublished historical photographic slides to the committee.

The inscription for this first award reads:

**“The First Richard A. Rowlett Maryland Ornithological Society -
Maryland/District of Columbia Records Committee Field
Excellence Award**

“This award is presented to Richard A. Rowlett to acknowledge his outstanding field work and to extend the appreciation of the Maryland Ornithological Society’s Maryland/District of Columbia Records Committee for his excellent contributions to the committee’s mission by broadening our knowledge of rare and unusual regional bird species during the decade of the 1970s. His considerable contributions include extensive written and photographic rarity documentation, research articles published on regional species identification and range limits, many educational contributions, and, especially, his pioneering of

Maryland Atlantic Ocean pelagic waters birding. This award is hereby perpetually named in honor of its first recipient, Richard A. Rowlett.

“Maryland Ornithological Society, Barbara Johnson, President, 2018
Matt Hafner, Maryland/District of Columbia Records Committee,
Chair, 2018”



Figure 1. Richard A Rowlett. Photo from Scientists at Sea: Richard Rowlett – Senior Marine Mammal Observer (Rowlett 2014).

RICHARD A. ROWLETT'S CONTRIBUTIONS TO MARYLAND BIRDING

Rowlett's contributions to our Mid-Atlantic regional knowledge of avifauna, and especially that of Maryland, are considerable and diverse.

There are over 500 references to “Rowlett” in fifteen volumes of *Maryland Birdlife*, primarily between 1971 and 1980, attesting to his dedication to birding the entire state of Maryland and as an indicator of his time spent in the field. Rowlett's name also appears in 56 references in *The Raven*, the journal of the Virginia Society of Ornithology between 1971 and 1982. Rowlett references also appear in 37 separate issues of *The Chat*, the journal of the Carolina Bird Club, mostly between 1972 and 1980. Rowlett's observations were also recorded in more than 70 seasonal reports, compiled by various editors, from the Middle Atlantic Coast (Maryland and Virginia), Southern Atlantic Coast (North Carolina), Appalachian (western Maryland), and Hudson-Delaware (Delaware

and New Jersey) regions between 1972 and 1979 in *American Birds*, the journal of the National Audubon Society.

Rowlett was a contributing observer to 78 MD/DCRC rarity reports and records from 1970 through 1980. At least thirteen of these were first state records for Maryland, including Maryland's first Sage Thrasher, Limpkin, American Flamingo, Atlantic Puffin, Yellow-nosed Albatross, Common Murre, Northern Fulmar, as well as many state second and third records, seasonal records (e.g., first for winter), and state geographic records (e.g., first for the Allegany Plateau). Rowlett also found or provided initial documentation for state firsts in Virginia (e.g., Arctic Tern, Gray Kingbird, Bridled Tern, and White-faced Storm-Petrel) and Delaware (Band-rumped Storm-Petrel and Garganey).

Many Rowlett photographs were published in ornithological publications. Notably, Finch et al. (1978) in *American Birds* featured several of Rowlett's photos of Maryland's 1975 Yellow-nosed Albatross, among others. Rowlett is also credited with photos in *Birds of the Carolinas* (Potter et al. 1980) as reviewed by Robbins (1979). Rowlett also published nine *Maryland Birdlife* cover photos, an average of one per year. One issue of *American Birds* included three Rowlett rarity photos within one single regional report (Scott 1978).

Rowlett also quickly made an indelible mark in pelagic exploration. The first page of the advertising flier for Rowlett's first Ocean City pelagic trip (1973) is shown in Figure 2.

Harding and Harding (1980) referred to Rowlett as "the dean of pelagic birding in the east." They quoted from one of his brochures,

"These trips provide the rare opportunity for those of us, who have idolized the exploits of early explorers in American Ornithology and Cetology, to be a part of our own modern day pioneering efforts to explore one of the last and long neglected frontiers of North America field biology, that of observing and establishing spatial and temporal distribution and habits of the pelagic birds and cetaceans living in the ocean waters off the middle-Atlantic States."

As one of the original "pioneers" of North American and Maryland pelagic birding, Rowlett's culminating 87-page 1980 United States Fish and Wildlife Service (USFWS) publication, *Observations of Marine Birds and Mammals in the Northern Chesapeake Bight* (Rowlett 1980b), was key to understanding and documenting Maryland and western Atlantic Ocean seabirds. At the time of publication, Rowlett was associated with the National Fish and Wildlife Laboratory, National Museum of Natural History; the National Coastal Ecosystems Team, USFWS; and the Biological Services Program, USFWS. This monograph has subsequently been cited by many state seabird authorities.

A MID-ATLANTIC REGIONAL FIRST!

The WINTER

SPECIAL TRIP *****

OCEAN CITY PELAGIC

February 3 or 4, 1973

***** SPECIAL TRIP

Leader: RICHARD A. ROWLETT, 715 Main St., Apt 5, Laurel, Md. 20810.
phone: 301--498-6091.

In a series of recent birding trips this winter aboard Cod fishing headboats, 10 to 20 miles out of Ocean City, some interesting new data is being learned about the status of the long neglected seabirds wintering off the Maryland coast. Species such as the Black-legged kittiwake, long considered rare at the Maryland latitude and represented only by a scattering of isolated records along the coast, has been found to be common, and often, the most abundant species only a few miles off shore. Razorbills, represented only by two or three isolated hypothetical coastal records have been encountered twice, once with three at one time, and a Skua, a first record for Maryland, was seen on January 13.

The potential in penetrating this unexplored aspect of Maryland Birdlife is indeed wide open, and you can be a part. Offered now is an opportunity to be a pioneer on a team that can make an important ornithological contribution, and perhaps too, find such new Maryland species as the Fulmar or one of the rarer alcids, as well as gain new information and insights toward offshore winter birdlore.

On Feb. 3, we are chartering a headboat out of Ocean City, strictly for the search of sea birds. We will (hopefully) go where the birds are, leaving promptly at 6:29 am (that means be on the dock or on board at 6:14 am or before) aboard the "TAURUS," from the Mast Restaurant in West Ocean City. We will steam as far as possible out to sea, hopefully 30 to 40 miles (the closer we get to the Gulf Stream, the better our odds for number and species). We should return no later than 5:00 pm. We will be chumming in an effort to attract desirable species close to the boat like Gannets, Kittiwakes, white-winged gulls, and who knows what else.

If the seas are unreasonably rough or weather is fowl, the trip will be post-poned until Feb. 4, and we will bird the Ocean City area for the Harlequin Ducks, Little and Black-headed Gulls, Ipswich Sparrow, etc., or what ever the group elects to do.

There are a number of people expressing strong interest in this trip. The cost is \$10.00 per head, and space will be limited to about the first 40. Reservations must be accompanied with \$10.00, and sent promptly to Richard A. Rowlett (address above), and should reach me no later than Jan 30. A minimum head count will be 20, which means that cancellations can be refunded only if this minimum can be met.

The "TAURUS" is equipped with an observation deck with seats above the stern, which is extremely beneficial as an excellent vantage point for observation for a large number of people, and for the sake of staying dry from the constant spray which may wash over the bow. Restrooms and a heated cabin are available. Several experienced "sea-birders," including Chandler Robbins and Paul DuMont, will be on board to help point out helpful field marks for those less experienced.

Winter boat trips at sea are often rigorous and require an excess of hardcore desire and stamina to endure the grueling hours. There are often long boring periods between birds, but the good fellowship accompanied by the often amazing close looks at Gannets and Kittiwakes squelches boredom.

Figure 2. Richard A. Rowlett's first Ocean City, Maryland, pelagic trip advertising flier for 3 or 4 February 1973.

While in the Atlantic area, Rowlett published 16 articles in *Maryland Birdlife* and other Mid-Atlantic regional journals, many dealing with first state records. His regional bibliography is presented herein.

In addition to his numerous articles, Rowlett gave presentations and workshops on various regional birding topics, notably on seabirds and shorebirds, to many local MOS chapters and other regional organizations.

In addition to rarity-focused activities, Rowlett contributed his time to various MOS causes and survey projects including May Counts, Christmas Bird Counts, Breeding Bird Atlases. He also served a term on the MOS Board of Directors as a Trustee/State Director from the Montgomery County Chapter. During the 1970s, the MOS annual conventions were mostly held in Ocean City and Rowlett organized pelagic trips for conference attendees. He also contributed money for the MOS Sanctuary Fund, raised from a portion of his pelagic trip fees.

Rowlett contributed over 50 pelagic and land bird study skin specimens to the Smithsonian Institution's Division of Birds from 1969 through 1983, with three from Maryland, one from Virginia, five from North Carolina, and four from New Jersey. His Maryland specimens are listed in Table 1.

Table 1. Richard A. Rowlett's Maryland specimens donated to the Division of Birds, National Museum of Natural History, Smithsonian Institution, Washington, DC.

| USNM# | Scientific Name | Common Name | Date Collected | Location | County | Preparation |
|--------|---------------------------|------------------|----------------|-------------------|-----------------|-------------|
| 574947 | <i>Spinus pinus pinus</i> | Pine Siskin | 7 Mar 1974 | Laurel | Prince George's | whole skin |
| 575650 | <i>Ardenna gravis</i> | Great Shearwater | 18 Jun 1978 | unrecorded | unrecorded | whole skin |
| 553853 | <i>Morus bassanus</i> | Northern Gannet | 5 Apr 1979 | Assateague Island | Worcester | skeleton |

Rowlett's MD/DCRC Maryland Reports and Records

A summary of Rowlett's MD/DCRC reports and records contributions (captured in the MD/DCRC database) is provided in Table 2.

Table 2. MD/DCRC Maryland reports and records documented by Richard Rowlett (in chronological order). (Legend: State “first” reports are bolded. Record # = MD/DCRC accession number; Decision/Status = MD/DCRC database decision or status [Accepted and Not Accepted - self-explanatory; Non-Review Species - the species is no longer reviewable; Ready - the report is ready to be scheduled for a review; Reviewable - there still may be a chance of locating detailed documentation; Unreviewable - no detailed documentation exists.])

| Record # | Species | Start Date | County | Location | Photo? | Decision/Status |
|----------|--------------------------|------------|--------|---------------------------|--------|--------------------|
| 2011-123 | Audubon’s Shearwater | 08/01/1970 | WORC | Assateague Island | √ | Non-Review Species |
| 1990-013 | Rufous Hummingbird | 05/01/1971 | FRDK | Lily Pons Water Gardens | | Accepted |
| 1995-014 | Limpkin | 05/25/1971 | FRDK | Lily Pons Water Gardens | √ | Accepted |
| 1995-015 | Sage Thrasher | 10/24/1971 | WORC | Assateague Island | √ | Accepted |
| 1997-307 | “Oregon” Junco | 01/27/1972 | MONT | Rockville | √ | Ready |
| 2004-086 | Hoary Redpoll | 03/02/1972 | MONT | Rockville | √ | Reviewable |
| 2007-110 | Common Redpoll | 03/03/1972 | MONT | Rockville | √ | Non-Review Species |
| 2003-482 | Eared Grebe | 03/14/1972 | WORC | Ocean City | | Not Accepted |
| 1997-234 | Painted Bunting | 04/18/1972 | MONT | Kensington | √ | Accepted |
| 2008-143 | Bewick’s Wren | 06/04/1972 | WASH | ?? | | Reviewable |
| 2008-144 | Bewick’s Wren | 06/04/1972 | ALGY | ?? | | Reviewable |
| 2008-145 | Bewick’s Wren | 06/08/1972 | ALGY | Little Orleans | | Reviewable |
| 2011-022 | Bewick’s Wren | 06/16/1972 | ALGY | Little Orleans | | Reviewable |
| 2001-088 | American Flamingo | 08/08/1972 | WORC | Assateague Island | √ | Accepted |
| 2007-086 | “Oregon” Junco | 12/17/1972 | GRTT | Garrett County CBC circle | | Reviewable |
| 2008-016 | Great Skua | 01/13/1973 | WORC | Atlantic Ocean | | Non-Review Species |
| 2006-147 | Northern Fulmar | 02/03/1973 | WORC | Atlantic Ocean | | Non-Review Species |
| 1997-411 | Pine Grosbeak | 02/10/1973 | GRTT | Big Savage Mountain | √ | Accepted |
| 1997-546 | Thick-billed Murre | 03/03/1973 | WORC | Atlantic Ocean | | Unreviewable |
| 2003-486 | Ruff | 05/06/1973 | SMST | Deal Island WMA | | Reviewable |
| 1997-575 | Pine Grosbeak | 12/17/1973 | GRTT | Friendsville | | Unreviewable |
| 1997-404 | Great Skua | 02/02/1974 | WORC | Atlantic Ocean | √ | Non-Review Species |

| Record # | Species | Start Date | County | Location | Photo? | Decision/Status |
|----------|-------------------------------|------------|--------|-------------------------|--------|--------------------|
| 2008-015 | Manx Shearwater | 06/01/1974 | WORC | Pelagic Zone | √ | Non-Review Species |
| 1999-027 | European Storm-Petrel | 08/08/1974 | WORC | Atlantic Ocean | | Unreviewable |
| 1997-531 | Long-tailed Jaeger | 08/08/1974 | WORC | Atlantic Ocean | | Unreviewable |
| 2006-151 | Northern Fulmar | 10/19/1974 | WORC | Atlantic Ocean | | Non-Review Species |
| 1997-412 | Atlantic Puffin | 02/01/1975 | WORC | Atlantic Ocean | √ | Non-Review Species |
| 2006-149 | murre species | 02/01/1975 | WORC | Atlantic Ocean | | Unreviewable |
| 2006-150 | skua species | 02/01/1975 | WORC | Atlantic Ocean | | Unreviewable |
| 1990-006 | Yellow-nosed Albatross | 02/01/1975 | WORC | Atlantic Ocean | √ | Accepted |
| 1990-007 | Atlantic Puffin | 03/16/1975 | WORC | Atlantic Ocean | √ | Accepted |
| 1997-522 | Purple Gallinule | 06/19/1975 | MONT | Seneca-C&O Canal | | Unreviewable |
| 2104-074 | Black-capped Petrel | 09/07/1975 | WORC | Atlantic Ocean | | Reviewable |
| 1997-645 | Long-tailed Jaeger | 12/06/1975 | WORC | Atlantic Ocean | | Unreviewable |
| 2003-493 | Thayer's Gull | 02/08/1976 | WORC | Ocean City | | Reviewable |
| 2006-145 | skua species | 04/11/1976 | WORC | Atlantic Ocean | | Unreviewable |
| 2004-161 | Magnificent Frigatebird | 04/14/1976 | WORC | Ocean City | | Reviewable |
| 1997-515 | Yellow Rail | 04/24/1976 | DORC | Elliott Island | | Unreviewable |
| 2008-034 | South Polar Skua | 05/09/1976 | WORC | Atlantic Ocean | | Accepted |
| 1997-409 | Northern Fulmar | 05/09/1976 | WORC | Atlantic Ocean | √ | Non-Review Species |
| 1986-017 | Sabine's Gull | 05/09/1976 | WORC | Atlantic Ocean | | Accepted |
| 1997-721 | skua species | 05/09/1976 | WORC | Atlantic Ocean | | Unreviewable |
| 1986-020 | Arctic Tern | 05/16/1976 | WORC | Atlantic Ocean | | Not Accepted |
| 1997-255 | Bridled Tern | 09/26/1976 | WORC | Atlantic Ocean | √ | Accepted |
| 2003-498 | Clay-colored Sparrow | 10/22/1976 | WORC | Assateague Island | | Reviewable |
| 1996-028 | Smith's Longspur | 11/27/1976 | WORC | Assateague Island | √ | Accepted |
| 1997-407 | Northern Fulmar | 12/04/1976 | WORC | Atlantic Ocean | √ | Non-Review Species |
| 1995-013 | Common Murre | 12/29/1976 | WORC | Ocean City Inlet | | Accepted |
| 1997-237 | Thick-billed Murre | 01/09/1977 | WORC | Assateague Island | √ | Accepted |
| 1997-236 | Common Murre | 01/16/1977 | WORC | Atlantic Ocean | √ | Accepted |
| 1997-528 | Ruff | 09/21/1977 | FRDK | Lily Pons Water Gardens | | Reviewable |

| Record # | Species | Start Date | County | Location | Photo? | Decision/Status |
|----------|-------------------------|------------|--------|------------------------|--------|--------------------|
| 1997-328 | Fulvous Whistling-Duck | 09/21/1977 | MONT | Violette's Lock | | Unreviewable |
| 1983-007 | Le Conte's Sparrow | 10/23/1977 | WORC | Ocean City | | Accepted |
| 1997-335 | Northern Shrike | 11/09/1977 | ANAR | Sandy Point State Park | √ | Accepted |
| 1997-306 | Common Ground-Dove | 11/10/1977 | ANAR | Sandy Point State Park | √ | Accepted |
| 1997-315 | Lark Bunting | 11/18/1977 | KENT | Galena | √ | Accepted |
| 1997-567 | Pine Grosbeak | 11/19/1977 | ALGY | Dan's Rock | | Unreviewable |
| 1997-232 | Clay-colored Sparrow | 01/15/1978 | HARF | Churchville | √ | Reviewable |
| 1997-326 | "Pink-sided" Junco | 01/19/1978 | PGEO | Laurel | | Unreviewable |
| 1997-348 | Hoary Redpoll | 02/11/1978 | MONT | Spencerville | √ | Ready |
| 1997-298 | Western Tanager | 04/22/1978 | MONT | Takoma Park | √ | Accepted |
| 2004-166 | Arctic Tern | 05/06/1978 | WORC | Atlantic Ocean | | Unreviewable |
| 1997-536 | Arctic Tern | 05/06/1978 | WORC | Atlantic Ocean | | Unreviewable |
| 1997-403 | Atlantic Puffin | 05/07/1978 | WORC | Atlantic Ocean | √ | Non-Review Species |
| 1997-408 | Northern Fulmar | 05/07/1978 | WORC | Atlantic Ocean | √ | Non-Review Species |
| 2004-167 | Arctic Tern | 05/07/1978 | WORC | Atlantic Ocean | √ | Unreviewable |
| 2004-168 | Arctic Tern | 05/07/1978 | WORC | Atlantic Ocean | | Unreviewable |
| 1998-001 | Purple Gallinule | 05/28/1978 | PGEO | Upper Marlboro | √ | Accepted |
| 1997-413 | South Polar Skua | 06/18/1978 | WORC | Atlantic Ocean | √ | Accepted |
| 1997-256 | South Polar Skua | 06/18/1978 | WORC | Atlantic Ocean | √ | Accepted |
| 1997-406 | Great Skua | 12/30/1978 | WORC | Atlantic Ocean | √ | Non-Review Species |
| 1997-405 | Great Skua | 12/30/1978 | WORC | Atlantic Ocean | √ | Non-Review Species |
| 1997-500 | Black-capped Petrel | 07/18/1979 | WORC | Atlantic Ocean | | Accepted |
| 1997-301 | South Polar Skua | 07/20/1979 | WORC | Atlantic Ocean | √ | Accepted |
| 2008-020 | Yellow-nosed Albatross | 12/03/1979 | WORC | Atlantic Ocean | √ | Accepted |
| 1997-518 | Yellow Rail | 12/25/1979 | WORC | Assateague Island | | Unreviewable |
| 1996-022 | Magnificent Frigatebird | 04/28/1980 | WORC | Ocean City | √ | Accepted |

RICHARD A. ROWLETT: BIBLIOGRAPHY

Rowlett's regional ornithological publications are summarized in the bibliography below. The bibliography is organized into three sections. First, are publications from his younger years in Missouri and from early western travels, which demonstrate the background that prepared him for his ten years in Maryland. Second, are his regional Middle Atlantic publications of the 1970s and 1980s. Third, are Rowlett's publications, presentations, and key blogs after he left Maryland and became a professional seabird and marine mammal observer, mostly in the Pacific Ocean.

In the Rowlett bibliography, I provided, in brackets, extensive field observation year annotations for many of Rowlett's observations to aid in following the chronology since, in many cases, papers were not published until many years after the field work was complete.

Early Years – Missouri and Western United States

This section presents a bibliography of Rowlett's nature and science work as a young man in Missouri and from trips to the western United States.

Rowlett R.A. 1969a. Bird reports from southeast Missouri. *The Bluebird* 36(3):2.

Rowlett, R.A. 1969b. Mortality at 400-foot tower [Spring 1966, Spring 1967]. *The Bluebird* 36(1):17–20.

Rowlett R. A. 1972a. First Records of *Eumops perotis* and *Microtus ochrogaster* in New Mexico [June 1968; August 1969]. *Journal of Mammalogy* 53(3):640.

Middle Years – Middle Atlantic Region

This section summarizes Rowlett's regional ornithological publications during his time in the Middle Atlantic region, focusing primarily on Maryland, Delaware, Virginia, and North Carolina. *Maryland Birdlife* cover photographs are noted.

Lee, D.S., and R.A. Rowlett. 1979. Additions to the seabird fauna of North Carolina. *The Chat* 43(1):1–9.

Rowlett, R.A. 1971a. First Maryland record for the Sage Thrasher [24 October 1971]. *Maryland Birdlife* 27(4):171–172.

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RICHARD A. ROWLETT: BIOGRAPHY

Biographical Sketch

Rowlett was born in 1947, and while at Northwest Missouri State University majoring in Meteorology, he transferred to Southeast Missouri State University, graduating with a degree in Zoology in 1970. Drafted by the United States Army the same year, he chose the option of going to Washington, DC over Vietnam and served two years in the Honor Guard at Arlington National Cemetery as a sentinel at the Tomb of the Unknown Soldier, afterwards, remaining in the DC area as a Biological Technician assisting professional staff with pesticide studies on upland game and water birds at Patuxent Wildlife Research Center in Laurel, Maryland.

Rowlett honed his skills for finding rarities in his early years. He was cited several times for observations of unusual sightings in Missouri: Easterla (1966) reported on the winter 1965–1967 winter finch invasion into northwestern

Missouri. Reports included a 20 November 1965 sighting by Rowlett, Watkins, and Easterla of a pair of White-winged Crossbills in a pine grove 10 miles west of Maryville, Missouri, and an observation by Rowlett and Easterla of at least six Common Redpolls in the same area on 18 December 1965 and 15 January 1966.

Rowlett (1969b) published an article in *The Bluebird*, the journal of the Audubon Society of Missouri, titled “Mortality at 400-foot Tower.” The paper presented the results of Rowlett’s daily surveys, a hand drawn plot of the kill locations relative to the tower and guy wires, and a discussion of the broader topic of tower kills.

While a student at Southeast Missouri State College in Cape Girardeau, Rowlett (1969a) published a detailed account and analysis of his 1968–1969 winter and spring bird sightings in southeast Missouri, his first exposure to the avifauna of the opposite corner of his home state.

Rowlett contributed a Black Rail specimen (USNM 564977) to the Smithsonian Institution that was collected in Missouri on 23 September 1969.

Interestingly, also in 1969, Rowlett’s brother, Roger, published a note in the same state journal titled, “Why Study Ornithology?” (Rowlett [Roger] 1969)

In the winter of 1968–1969, Rowlett was credited with many reports in the winter bird surveys and also in the spring and summer surveys (Anderson 1971a, 1971b, 1971c). Regional birds of note reported by Rowlett include Western Meadowlarks, Evening Grosbeaks, and Red Crossbills in winter; Eared Grebe, White-rumped Sandpiper, 34 Fish Crows, Red-breasted Nuthatches, and continuing Evening Grosbeaks into the spring; and an adult Louisiana [Tricolored] Heron and a Glossy Ibis in the summer.

New Mexico

During the summers of 1968, 1969, and 1970, Rowlett spent time in the mountains of northeastern New Mexico with his father, Ray L. Rowlett, where he became familiar with many western species. He referenced his New Mexico experience in several of his later articles (Rowlett 1971a, 1971b). He published records of Western Mastiff-bats (*Eumops perotis*) and Prairie Voles (*Microtus ochrogaster*) observed and collected in New Mexico (Rowlett 1972a).

Early Christmas Bird Counts

Rowlett began participating in Christmas Bird Counts (CBCs) in 1965, having been credited as an observer in two Missouri CBCs according to Hanselmann (1966). In 1969 and 1970, Rowlett was listed as a participant in the Maryville CBC (Dawson 1970, 1971).

In 1975, Rowlett [presumably Richard] reported White-winged Crossbills and a Lincoln Sparrow on the 1975 Maryville CBC (Jones 1976).

During the 1977 Squaw Creek [Missouri] CBC, Rowlett and Barksdale reported and submitted a detailed sight report of a Gyrfalcon, seen in flight for about five minutes (Goodge 1978). This sighting was called the “find of the season” by Robbins [M.] (1978) and later referred to as the only “reliable sighting” of this species, prior to the first photographed Missouri record of a bird caught in a falconer’s trap in 2000 (Easterla and Scarbrough 2001).

In 1978, Rowlett is credited with having reported two Common Yellowthroats (unusual) on the Squaw Creek CBC (Goodge 1979).

Rowlett Interview

In her “Interesting Member Profile” newsletter interview for the East Lake Washington Audubon Society, McQuade (2005) wrote of Rowlett:

“After Patuxent, he assisted the Smithsonian Institution National Fish & Wildlife Lab Division of Mammals by trapping, mist-netting and preparing specimens for display, adding them to the museum collection; even donating his own collection of 2000 specimens to the museum in 1982. From 1978 to 81, as Regional Cruise Leader he conducted and supervised field research for the University of Rhode Island Marine Science Consortium, Wallops Island, Virginia. Next, he worked seven seasons as a Naturalist Guide & Lecturer on board Society Expeditions luxury cruise ships, visiting Chilean fjords to the Antarctic Islands, Falklands, Shetlands, South Georgia, with a focus on wildlife ecology and history.

“Following that, as a senior scientist and cruise leader, he organized and supervised multi-year, multi-ship seabird and cetacean surveys for the International Whaling Commission, Cambridge, England. And from 1981 to 1988 he was responsible, as Field Supervisor, for National Marine Mammal Laboratories, Seattle, for studying impacts on North Pacific and Alaskan Dall’s Porpoise, other sea mammals, and seabirds while assigned to the 176 Japanese vessel fleet engaged in high seas drift net salmon fishing.

“From then until the present [2005] he has been associated with NOAA/NMFS [National Oceanic and Atmospheric Administration/ National Marine Fisheries Service], including Southwest Fisheries Science Center, La Jolla, California on term appointments and contracts, working out of Sand Point, Seattle, and La Jolla. This involves numerous seasonal, multi-year-at-sea marine mammal, seabird

and turtle projects as well as whale/dolphin and tuna population recovery issues worldwide. He considers his terrestrial field research of mammals, birds, reptiles and amphibians throughout Central, North America, Peru and Alaska of secondary importance in his biological work around the world.”

Rowlett Professional Update

Earlier, in 2011, Rowlett was at Palmyra Atoll (North Pacific Ocean, between Hawaii and American Samoa) working the seas within the 200 nmi [nautical mile] EEZ [Exclusive Economic Zone] around Palmyra. He remarked that observations of seabirds along the standard survey lines at sea were excellent, especially for *Pterodromas* where he logged 16 species. He noted that the North Equatorial Counter Current at the tropical mid-North Pacific (2–9° N) provided an endless bounty of *Pterodroma* gadfly petrels and perhaps the richest region on Earth for diversity with this genus.

Rowlett’s (2014) self-described NOAA web page profile follows:

“I started as a recreational birder which evolved into a decade of organizing and running seabird and whale watching trips off the East Coast (Ocean City, MD and Cape Hatteras, NC) through the 1970’s while my “day job” was with the Museum of Natural History (Smithsonian, Washington, DC). These first ever pioneering efforts into previously and amazingly “uncharted” waters led to a significant data base simply through self-teaching and growing experience, that I moved on to the first ever marine mammal, turtle, and seabird surveys in the NW Atlantic off US East Coast (University of Rhode Island project acronym CETAP) and from there these ‘dangling carrots’ just kept escalating and expanding to a decade (1980’s) of marine mammal surveys circumnavigating Antarctica (southern summers) and North Pacific Alaska/Aleutian/Bering Sea (northern summers) with the National Marine Mammal Laboratory, Seattle, WA, working with Dall’s porpoise and the Japanese high seas drift net salmon fishery. Foreign fisheries work filled some gaps in between until coming on with NOAA Fisheries and Southwest Fisheries Science Center (La Jolla, CA) in 1989 as a marine mammal observer in annual marine mammal surveys including Eastern Tropical Pacific, U.S. West Coast, Alaska, and Hawaii projects in addition to 15 seasons monitoring gray whale calf migration along the central California coast at an extraordinarily unique shore based study site, Pt. Piedras Blancas Light Station near San Simeon, CA.”

SUMMARY

Richard A. Rowlett's contributions to the knowledge of the avifauna of Maryland and the Middle Atlantic region are legion. His indefatigable efforts to seek out rare and unusual avian sightings, on both land and sea, during the decade of the 1970s are preserved by numerous published scholarly articles and his photographs. His influence persists, even if many contemporary birders did not know him personally, or even know of his renowned reputation. The MD/DCRC is pleased to have this opportunity to acknowledge his ornithological contributions to our region and to educate the birding public on his significant accomplishments.

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Open Ocean Roosting of Snow Geese (*Chen caerulescens*)

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The Ocean City, Maryland, Christmas Bird Count has been conducted in late December every year since 1948. For the first two decades of the count, an average of 200 Snow Geese were counted each year with a range of 0–2000. All were presumed to be the Greater Snow Goose (*Anser caerulescens atlantica*) which wintered in and around Assateague Island and the Sinepuxent Bay to its immediate west. Starting in 1973, the count saw a major influx of geese, with 7710 geese being counted. Over the ensuing 30 years, the numbers of Snow Geese ranged from 10,000 to 66,000 and averaged about 30,000 in the 1990s. Almost all of these birds were considered to be Greater Snow Geese, with the numbers of blue morph birds representing about 0.25% of the total geese counted. A number of Ross's Geese (*Anser rossii*) has also been counted among the large flocks since 1992.

The bulk of these geese during those 30 years were observed feeding in the winter wheat (*Triticum* L. spp.) and other fields from the western outskirts of West Ocean City, west to the Pocomoke River on the boundary of Worcester and Wicomico Counties. A private marsh, known as Jenkins Pond, became one of the primary roosts for these geese during these years as no hunting and limited access was then in force. Jenkins Pond is located about 6 km (4 mi) southeast of Berlin and about 5 km (3 mi) west of Sinepuxent Bay. In 2002, this wetland changed hands and became a private hunting preserve. The geese were hazed repeatedly the ensuing winter when only 9000 geese were counted in the whole circle (December 2002), with almost none roosting at Jenkins Pond, compared to 51,000 counted a year earlier in December 2001.

On 27 December 2003, the night before the count, I noted 100 to 200 Snow Geese passing over West Ocean City shortly after dark and heading west. I did not consider the flight of any importance until the next day. A new daytime roost site for Snow Geese was discovered by Joseph R. Jehl and the author's count party working at the Ocean City Inlet. The roost was due east of, and just over the horizon (~6–7 km [~4 mi]) from, the Inlet. Many thousands of birds clearly roosted there all day. They were only visible from the Inlet when a boat ran through the flock and for a few minutes, thousands of white geese could be seen lifting up from the water before settling back down to the surface of the ocean. These repeated incursions by the high-speed boats may have been hunters, but no evidence was available to confirm this hypothesis.

No white geese flocks were seen passing overhead in the immediate area of Ocean City by the couple dozen count observers that were afield from approximately 0500 until 1730 hours on 28 December 2003. Darkness fell at about 1730. By 1800 and until 2000 hours, many thousands of geese could easily be seen and heard flying west over the lights of Ocean City in long waving white lines heading inland. A gross estimate of a minimum of 24,000 geese passing over Ocean City was made, but that made no account for flocks that may have been passing to the south or the north of Ocean City that evening.

It was not clear what the actual daily schedule of these birds was, nor was it totally clear the purpose of roosting in daylight on the open ocean and then flying inland after dark. The open fields and other places inland were not searched by any observers later that evening, nor were local farmers or hunters asked what they were seeing or hearing during the night in the region. It seems unlikely that the flocks of geese were simply shifting roost sites after spending about 12 hours or more on the open ocean without feeding. Gauthier et al. (1988) report similar field feeding in Greater Snow Geese in Quebec, with approximately half the day spent feeding and the other half in roosting or other activities.

At the time, the waterfowl season for white geese was open in Maryland. I had observed a small number of hunters that were working the large fields between Ocean City and the west side of the county on 27 December 2003. One must wonder if these geese were roosting on the open ocean to avoid the daytime hunters and also if they spent stormy days out on the open ocean. Mowbray et al. (2000) make no mention of the use of the open ocean for roosting. No such roosting flocks on the ocean were noted in any subsequent Ocean City Christmas Bird Counts through 2016.

The weather during those two days (27–28 December 2003) was relatively mild with only a moderate wind. The moon had been full about 5–6 days prior to this set of observations. Temperatures ranged from about -2° to 10° C (28° to 50° F), while the winds were calm to 6 km/hr (4 mi/hr) from the east. No fog or precipitation was present during the period.

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First Maryland Record of Trindade Petrel (*Pterodroma arminjoniana*)

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On Saturday evening, 24 August 2012, a *See Life Paulagics* cruise left Lewes, Delaware, aboard the *Thelma Dale V*. Our objective was to reach the offshore of Baltimore Canyon, off the edge of the continental shelf in over 1,000 fathoms (6,000 ft) of water before daybreak. There had been five straight days of winds with an easterly component.

When we reached our destination, we stopped and drifted in the dark as we put out a heavy slick of ground fish, fish oil, and beef suet chunks. As first light on 25 August 2012, a call of “Storm-petrel!” went out. A quick check and the bird turned out to be a Leach’s Storm-Petrel (*Oceanodroma leucorhoa*). The second storm-petrel was also a Leach’s. The third was a Band-rumped Storm-Petrel (*O. castro*). As numbers of Wilson’s (*Oceanites oceanicus*), Leach’s, and Band-rumped Storm-Petrels passed by heading upwind towards our slick, we also observed a few shearwaters. A call went out that a dark bird was approaching the boat; we were shocked to see that it was a dark morph Trindade [formerly Herald] Petrel (*Pterodroma arminjoniana*). The bird immediately stood out due to its dark overall coloration. Several leaders aboard had previous experience with this morph of Trindade Petrel and it was quickly identified by its extremely long, thin wings (Figure 1), smallish head and bill (Figure 2), and high arcing flight all of which helped rule out Sooty Shearwater (*Ardenna grisea*). Closer examination showed the jaeger-like pattern of the under primaries and primary coverts (Figures 1 and 2). The bird stayed near us, flying around, heading away, and then flying back towards the boat for nearly an hour. This was a Maryland state bird for all aboard.

The Trindade Petrel was not the only great bird for the trip. We also found 3–5 Black-capped Petrels (*Pterodroma hasitata*), a species that had only two accepted Maryland records prior to this trip (MD/DCRC 2018), and great looks at a White-faced Storm-Petrel (*Pelagodroma marina*). The final count for Leach’s was 58, for Wilson’s was 85, and for Band-rumped was a record shattering 122. Other species observed that day were Arctic Tern (*Sterna paradisaea*), Long-tailed Jaeger (*Stercorarius longicaudus*), and Bridled Tern (*Onychoprion anaethetus*).



Figure 1. Trindade Petrel, *Pterodroma arminjoniana*. Photographed on 25 August 2012 by Paul A. Guris.



Figure 2. Trindade Petrel. Photographed on 25 August 2012 by Paul A. Guris.

This report of Trindade Petrel (2012-075) was accepted in 2013 by the Maryland/District of Columbia Records Committee and added to the official list of Maryland birds (MD/DCRC 2018). Besides the Maryland sighting, only four other records of Trindade Petrel have occurred north of Virginia (Table 1). Other than the 1933 New York hurricane-stranded record (eBird 2018a), the four subsequent records have occurred more recently, Maryland (1) in 2012, and Maine (1) and Massachusetts (2) in 2014.

Additionally, an Atlantic Marine Assessment Program for Protected Species (AMAPPS) survey conducted by the National Oceanic and Atmospheric Administration (NOAA) on 31 July 2013 supplied eight Maryland eBird (2018) reports that documented a mix of 15 light and dark morph Trindade Petrels (including photographs for most). These reports are currently listed in the MD/DCRC (2018) database as “Reviewable” and shortly will be ready for evaluation by the MD/DCRC.

Table 1: East Coast Trindade Petrel records north of Virginia. Listing is north to south.

| State | Date | Location | Morph | Source |
|---------------|-------------|--|-------|-------------------------------------|
| Maine | 10 JUN 2014 | Ogunquit Beach, Ogunquit, (43.255417° N, -70.59175° W), York County | dark | Bevier 2017, MBRC 2018, eBird 2018b |
| New York | 24 AUG 1933 | Caroline Center, 15 miles southeast of Ithaca, Tompkins County | dark | eBird 2018a, eBird 2018b |
| Massachusetts | 26 JUL 2014 | Georges Bank, (39° 57.1' N by 57° 36.1' W), Nantucket County (pelagic) | light | MARC 2018, eBird 2018b |
| Massachusetts | 28 JUL 2014 | Georges Bank, (40° 03.6' N by 67° 52.4' W), Nantucket County (pelagic) | light | MARC 2018, eBird 2018b |
| Maryland | 25 AUG 2012 | offshore of Baltimore Canyon, Worcester County (pelagic) | dark | MD/DCRC 2018, eBird 2018b |

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Mikey Lutmerding. It is our leaders who help make the experience better for everybody. Thanks are also due to Phil Davis (Secretary of the MD/DCRC) for providing details on the NOAA-AMAPPS survey, and to an anonymous reviewer for providing helpful comments. And last but not remotely least, I would like to thank my wife, Anita Guris, for all she does. Without her help I would never be able to organize these trips.

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The Band-rumped Storm-Petrel Complex (*Oceanodroma castro*) in Maryland Waters

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Abstract: The Band-rumped Storm-Petrel (*Oceanodroma castro*) has been known to consist of numerous populations breeding on scattered islands in both the Atlantic and Pacific Oceans. Recent research has identified genetically distinct populations as well as behaviorally distinctive populations in the Atlantic Ocean. Identification of these separate entities at sea is problematic, but in some circumstances, a presumptive identification may be warranted. Pelagic trips in Maryland waters have yielded photographic evidence strongly suggestive of two distinctive types. Museum specimens of hurricane-grounded birds have been consistent with the photographic evidence.

The bird in North America currently known as the Band-rumped Storm-Petrel (*Oceanodroma castro*) (BANP) was first described by Harcourt (1851) as *Thalassidroma castro* from the “Dezerta Islands” in the Madeiran archipelago. In his field guide to eastern birds, Peterson (1947) listed it as an accidental, using the name Madeira Petrel. The American Ornithologists’ Union Check-List (fifth edition) referred to it as Harcourt’s Petrel (AOU 1957). In a revision of his guide, Peterson (1980) called it Band-rumped Storm Petrel (Harcourt’s Storm Petrel). Subsequent gyrations of various checklist committees settled on BANP. As for its status as an accidental, deepwater pelagic trips revealed that it occurs regularly in western Atlantic waters, predominantly in the Gulf Stream.

In the late 1980s, a Ph.D. student at the University of Glasgow, United Kingdom, by the name of Luis Monteiro was studying mercury levels in fish and other vertebrates in the waters around the Azores using the resources of the Department of Oceanography and Fisheries at the University of the Azores (Monteiro et al. 1991). While studying nesting seabirds, he observed that the mercury levels in the “hot” season (April–August) breeding “Madeiran” Storm-Petrels (as BANP are known in Europe) were 50% lower than those in the “cool” season (September–January) breeders, suggesting that they might be discrete populations (Monteiro et al. 1995). Separate seasonal populations of Madeiran Storm-Petrels had been documented in the Galápagos Islands by Snow and Snow (1966). Further studies with his thesis advisor R.W. Furness of the University of Glasgow established that hot-season birds had 5–10% smaller eggs

and body mass but longer tails and tail notches than cool-season birds (Monteiro and Furness 1998). They speculated that the two populations may represent “sympatric speciation through temporal partitioning of reproduction and may be better treated as sibling species.” In addition, preliminary analysis of mitochondrial DNA in collaboration with the laboratory of V.L. Friesen, Queens University, Kingston, Ontario, suggested genetic isolation of the two populations. Tragically, Luis Monteiro was killed in a 1999 plane crash while extending his studies in the Azores.

Before his death, Monteiro had arranged to begin working with Mark Bolton of the Royal Society for the Protection of Birds, United Kingdom, to expand studies of the storm-petrel breeding colonies on various islands in the eastern Atlantic (Figure 1). Vocalization playback experiments (Bolton 2007) showed that hot-season birds in the Azores were non-responsive to the calls of cool-season birds, as well as calls of birds from Cape Verde or the Galápagos Islands. Further mitochondrial DNA studies (Smith et al. 2007) established that the Galápagos Islands and Cape Verde birds diverged from all the other populations at least 150,000 years ago, and that the Azores hot-season birds were distinct from the cool-season birds breeding in the Azores and in other eastern Atlantic islands, having diverged 70,000–154,000 years ago. Moreover, the hot-season birds from the Madeiran Islands also appeared to be diverging from the cool-season birds. More extensive mitochondrial and nuclear DNA studies essentially confirmed these findings and revealed that the Cape Verde hot and cool seasonal populations appeared to be genetically isolated, but morphologically indistinguishable, whereas the two seasonal groups in the Selvagens Islands and Madeiran Islands had slight genetic but some morphometric differences (Friesen et al. 2007) and were possibly in the process of diverging.

Finally, with the addition of breeding, molt timing, and feather isotope-based diet data, Bolton et al. (2008) concluded “that the hot-season Azores population should be considered a new species for which we propose the name *Oceanodroma monteiroi*, Monteiro’s Storm-Petrel.” By extension, that means that the cool-season birds are also a full species that seems to be distributed among the eastern North Atlantic islands with the beginnings of hot/cool divergence.

The vocalizations of the various populations of BANP were recorded on their breeding grounds and showed significant differences easily discerned by ear in the field, a strong indicator of speciation. These studies are summarized in a remarkable book, *Petrels Night and Day: A Sound Approach Guide* (Robb et al. 2008). The book largely recounts Robb’s adventures while obtaining his recordings, but does summarize what knowledge we have to help us differentiate the four northeastern Atlantic populations of BANP. (It also covers such



Figure 1. Band-rumped Storm-Petrel colonial nesting islands in the eastern Atlantic Ocean. (Map data © 2017 Google, Inst. Geogr. National)

identification problems as Fea's/Zino's/Desertas Petrels (*Pterodroma feae*/*P. madeira*/*P. deserta*), Cory's/Scopoli's/Cape Verde Shearwaters (*Calonectris diomedea borealis*/*C. diomedea diomedea*/*C. edwardsii*), and a host of other pelagic species.)

The four populations of BANP studied were: 1) the hot-season breeder from the Azores, Monteiro's Storm-Petrel (*Oceanodroma monteiroi*); 2) the longest-standing divergent taxon from the Cape Verde Islands, which they call Cape Verde Storm-Petrel (*O. jabejabe*); 3) the hot-season breeders from Madeira, the Selvagens Islands, and Canary Islands which retain the name Madeiran Storm-Petrel (*O. castro*); and 4) the cool-season breeders from the northeast Atlantic which they call "Grant's" Storm-Petrel but which also retain the scientific name *O. castro*. Thus Robb et al. (2008) acknowledge the strong DNA evidence (Friesen et al. 2007) that the "Grant's" population is not genetically distinct from the hot-season breeding Madeiran populations. Furthermore, "Grant's" has not been formally described as a separate taxon. Yet, the distinctive vocalizations of all four populations provide a mechanism for assortative mating and thus point to the beginnings of speciation. Just as it is wise to monitor subspecies of all taxa, perhaps it is equally wise to monitor the two populations of *O. castro* storm-petrels for conservation purposes. Since it may be possible to distinguish the cool-season and hot-season populations as they visit western Atlantic waters, they will be described separately in this paper with the caveat that many may not be distinguishable beyond the BANP level.

DIFFERENTIATING CHARACTERS

In preparing his seabird book, Steve Howell (2012) spent several spring seasons joining Brian Patteson's "Spring Blitz" (*Seabirding Pelagic Trips*, Hatteras, North Carolina) consisting of as many as 16 trips in a row, as well as numerous summer trips. Using such features as adult primary molt stage and morphological differences, he determined that 80–90% of BANP in the Gulf Stream were cool-season breeders which he called "presumed Grant's". The others were mostly presumed Madeiran hot-season breeders, with an occasional outlier, the unlikely Cape Verde or Monteiro's (Howell et al. 2010). Digital photography has greatly aided in the determination of molt and structural characters, but close views with binoculars can often show the critical features. It is important to have experience with "Grant's" as the other three vary from "Grant's" only subtly. Also, note that single photos, or a brief look, can often give the impression of a significant tail notch, since viewing a keel-shaped tail from an angle will make it appear deeply notched even if it is not. Tail notch, stage of adult primary molt, wing and body shape, carpal bar length, and relative width of the rump band are key features to separate the forms, but often the forms have to remain undifferentiated.

Multiple Hatteras, North Carolina, pelagic trips in a row are a good way to become familiar with these birds as they frequent the Gulf Stream—which is reached in two hours—and are readily compared with Wilson’s Storm-Petrels (*Oceanites oceanicus*). In May and June, some of the molt differences can be most pronounced. The most useful character in identifying “Grant’s” in the spring is the stage of primary molt which is a complex subject reviewed in detail in Howell et al. (2010) and in Flood and Fisher (2011). In short, molt proceeds from the innermost to the outermost primaries. In the spring, “Grant’s” exhibit two to four worn outer primaries with new or missing inner primaries, whereas hot-season breeders should have, for the most part, completed primary molt. However, any non-molting bird could be a juvenile of any population and non-breeders could be following unknown molt schedules, so extreme caution is necessary. As usual, multiple characters should be considered. In recent years, finding BANP in Maryland waters has now become a regular feature of *See Life Paulagics* trips out of Lewes, Delaware, with some spectacular numbers, and comparable photos (Table 2). The key factor is that these are 18-hour overnight trips beyond the edge of the continental shelf in depths of 1000 fathoms (6,000 ft) or more. BANP are now an expected species on summer trips from Brooklyn, New York; Cape May, New Jersey; and Lewes, Delaware, with *See Life Paulagics*.

The storm-petrels we see are apparently in a clockwise rotation around the Atlantic and are using the Gulf Stream to propel them back to their respective breeding grounds. Adults are usually in the process of completing primary molt prior to breeding. Occasional exceptions could be juveniles from cool-season breeders or non-breeding adults, which add to the confusion. To add a further caution, keep in mind that there are southern Atlantic breeders on Saint Helena and Ascension Islands whose migratory movements, morphometrics and molt schedules are unknown.

Cool-season breeding Madeiran (“Grant’s”) Storm-Petrel (*Oceanodroma castro*)

This may be the default population in the western Atlantic. A cool-season breeder banded by Luis Monteiro in the Azores was collected in the Gulf of Mexico on 31 May 1993 (Woolfenden et al. 2001), so we know Azores birds can come this way. From August to March, 3000–5000 pairs breed in the cool season on the Azores, Berlengas, Canary Islands, and the Madeiran Archipelago including Desertas and the Selvagens Islands (Robb et al. 2008). Egg-laying occurs from early October to December (Friesen et al. 2007). Adult primary molt is primarily from February to August, but with the latest recorded on 17 October (Bolton et al. 2008) so they usually exhibit one to four faded outer primaries in May and June, fewer in July (Robb et al. 2008). “Grant’s” typically has long, narrow wings, not unlike Leach’s Storm-Petrel, *Oceanodroma leucorhoa* (Howell et al. 2010). The wing width can vary with wind and flight conditions and single photos can capture extremes that may not be typical. The

upper tail covert band is narrow, uniform in width and about 30–40% of the overall tail projection (Robb et al. 2008). The tail notch ($\bar{x} = 3.53 \text{ mm} \pm 1.47 \text{ SD}$; range 1–7 mm [$\bar{x} = 0.14 \text{ in} \pm 0.06 \text{ SD}$; range 0.04–0.28 in]) is usually inconspicuous, making the long tail appear square (Bolton et al. 2008).

Monteiro's Storm-Petrel (*Oceanodroma monteiroi*)

About 300 pairs breed in the hot season from March to September in the Azores (Bolton et al. 2008). Egg-laying occurs in May to early July (Bolton et al. 2008). Primary molt is from August to February (Robb et al. 2008), but the last date recorded was 17 May (Bolton et al. 2008), so a worn outer primary in May or a shed inner primary in August are possible (Robb et al. 2008). The body is some 5–10% lighter than “Grant’s”, but the wings and tail are similar in length, making both proportionately longer than in “Grant’s” (Bolton et al. 2008). The result is lighter wing loading in Monteiro’s, making it possibly more buoyant. The carpal bar is more pronounced than in the other populations and extends to the joint (Bolton et al. 2008). The carpal bar is subtle and does not reach the joint in the other three populations. When soaring, the wings are uniformly broad to a somewhat rounded tip (see Robb et al. 2008, pages 242–243, and Howell et al. 2010). The rump band is variable in width. The tail notch ($\bar{x} = 7.81 \text{ mm} \pm 2.3 \text{ SD}$; range 1–14 mm [$\bar{x} = 0.31 \text{ in} \pm 0.09 \text{ SD}$; range 0.04–0.55 in]) when deepest could be conspicuous from all angles (Bolton et al. 2008). Monteiro’s apparently remains in the Azores year-round, while “Grant’s” leaves the Azores after the breeding season, thus accounting for the different mercury levels found by Luis Monteiro (Bolton et al. 2008). [One wonders if the added mercury is acquired by “Grant’s” in the western Atlantic from fallout of airborne mercury derived from coal-fired power plants.] Any Monteiro’s Storm-Petrels in the western Atlantic are probably non-breeding adults or juveniles.

Hot-season breeding Madeiran Storm-Petrel (*Oceanodroma castro*)

From March to October, 2000–4000 pairs breed in the hot season on the Madeiran Archipelago including the Desertas and the Selvagens Islands, and in the Canary Islands (Robb et al. 2008). Egg-laying takes place in May–June and June–July (Friesen et al. 2007). Adult primary molt is from August/September to February, so none is expected from May to July, with perhaps only a shed inner primary late in August (Robb et al. 2008). Madeiran is smaller, chunkier and blacker than either “Grant’s” or Monteiro’s (Howell et al. 2010), possibly with a fine bill in females (6.08 mm [0.24 in] at the tube, 5.19 mm [0.20 in] at the gonys; specimen USNM 189861) or heavy in males (6.57 mm [0.26 in] at the tube, 5.58 mm [0.22 in] at the gonys; specimen USNM 189860) (Table 1) (see Howell [2012, page 371, figures 167 and 168, and pages 376–377, figures S3.4 and S3.9]). Both the male and the female museum specimens had worn outer primaries, bill lengths of 14.65 mm [0.58 in] and rump bands of 1.5 cm [0.6 in] but the male’s body was 3 cm [1.2 in] longer than the female’s and the tail notch was 3 mm [0.1 in] compared to none in the female. The slight tail

notch is sometimes visible, and the wings and tail are shorter than in “Grant’s” (Howell et al. 2010). The rump band is narrow and often shows scattered black flecks, seen less frequently in “Grant’s”, or an occasional gray central dividing line (Howell et al. 2010).

Cape Verde Storm-Petrel (*Oceanodroma iabejabe*)

Possibly low thousands breed from October to June on the Cape Verde Islands, with two overlapping populations covering both hot and cool seasons. Egg-laying occurs from October to May (Friesen et al. 2007). Primary molt occurs from about March to December, so spring and summer birds could exhibit virtually any stage of primary molt. Cape Verde is smaller than “Grant’s” and Monteiro’s with a longer bill (Murphy 1924, Howell et al. 2010). The wings may be broader than “Grant’s” and the uppertail covert band relatively wider than “Grant’s”, but this may be speculation (Robb et al. 2008). For example, a specimen from Cape Verde (USNM 197701, Table 1), a female collected 17 May 1922, had fresh primaries, a 1.5 cm [0.6 in] rump band and a 5 mm [0.2 in] tail notch, measurements very similar to hot-season Madeiran birds. Likewise, another specimen, a male collected on 11 July 1971 (USNM 525795) at Saint Helena in the South Atlantic Ocean, had fresh primaries, a 1.7–2.0 cm [0.7–0.8 in] rump band and a 3–5 mm [0.1–0.2 in] tail notch.

Table 1. Band-rumped Storm-Petrel specimens from the eastern Atlantic Ocean housed at the Division of Birds, National Museum of Natural History, Smithsonian Institution, Washington, DC (NMNH 2018).

| Catalog Number | Sex | Preparation | Collection Location | Collection Date | Collector |
|--------------------------|----------|--|--|-----------------|----------------|
| USNM 189860 | ♂ | skin: whole | Porto Santo, Porto Santo Island, Madeira Islands | 14 Oct 1902 | W.F. Rosenberg |
| USNM 189861 | ♀ | skin: whole | Porto Santo, Porto Santo Island, Madeira Islands | 12 Sep 1902 | W.F. Rosenberg |
| USNM 197701 ^a | ♀ | skin: whole | Raso Island, Cape Verde | 17 May 1922 | J.G. Correia |
| USNM 490825 | ♂, adult | skin: partial, flat; skeleton: whole; | Egg Island, Egg Harbor; Saint Helena | 11 Jul 1971 | -- |
| USNM 491205 | -- | skeleton: partial, miscellaneous bones | Egg Island, Saint Helena | 11 Jul 1971 | -- |
| USNM 525795 | ♂, adult | skin: whole; skeleton: partial, trunk | Egg Island, 1 mile offshore, Saint Helena | 11 Jul 1971 | -- |
| USNM B 42699 | -- | egg(s) | Ilho Da Baixo [sic], Madeira Islands | 11 Jul 1907 | E. Schmitz |

^a Note: Although the NMNH (2018) online database gives the Catalog Number for the Cape Verde specimen as USNM 364910, the specimen tag reads USNM 197701.

CAUTIONS IN ASSIGNING SPECIFIC NAMES TO BANP

Even though there are statistically significant differences among the four populations of BANP in several morphological measures such as wing and tail length or tail notch, the ranges are wide enough to render broad overlap. Thus, in one study at sea east of Madeira in late April 2009, Shirihai (2009) found extensive variation in tail notch, color, and rump band thickness “virtually comprising the spectrum of variation shown in Robb et al. (2008) for the four forms...” Oddly, the vast majority of the birds were closer to what Robb et al. (2008) described as “Grant’s” at a time when the hot-season Madeiran birds were the expected population, yet they did not exhibit the advanced primary molt Howell et al. (2010) observed off Hatteras. One interpretation would be that the Madeiran birds include all the described morphological forms. But it is possible that non-breeding birds from various populations gather in favorable feeding grounds. Testing these hypotheses, or others, will require considerably more field work.

Flood and Fisher (2011) state that they “have been unable to make any advances in establishing differences that may assist in the confident identification of the various populations at sea...” Obviously, the at-sea identification of the four populations is fraught with uncertainty, yet under some circumstances, it seems possible to make tentative assignments to one form or another. The best example is in the spring when cool-season breeding “Grant’s” exhibit conspicuous late stage primary molt. Even then, Howell et al. (2010) refer to them as “presumed “Grant’s” and the non-molting birds as “possible Madeiran”.

While many, if not most, BANP should be left without further assignments, birds outside the range of overlap and exhibiting a complete set of characters for any one form may deserve the “presumed” or “possible” notation. The possibility of adding such carefully considered data points to an evolving field ought to be a source of encouragement for pelagic birders armed with digital cameras. If further field work should produce useful criteria for distinguishing island or seasonal specific populations, a library of digital photographs could be invaluable.

IDENTIFYING STORM-PETRELS PHOTOGRAPHED IN MARYLAND WATERS

Ideally, observations would be best made in the spring when late stage primary molt flags presumed “Grant’s”. As it turns out, most of the trips have been in August (Table 2) when Monteiro’s could be in early stages and Cape Verde in any stage of primary molt. Nevertheless, the ten August trips that yielded photos produced many examples with features consistent with typical “Grant’s” Storm-Petrels. (Figure 2) These birds show long tails and wings with no primary molt,

Table 2. Band-rumped Storm-Petrel specimens and reports chronologically listed in the Maryland/District of Columbia Records Committee database (MD/DCRC 2018a, 2018b). (Note: Multiple listings for the same date indicate individual submittals by various observers. In these situations, the numbers of birds will differ based on the documentation submitted by each observer. Although multiple submittals can occur on the same date, they are not necessarily for the same bird[s].)

| Control Number | Date | Location | Number of Birds | Photos | Status/ Decision |
|----------------|-------------|---|--|---------|------------------|
| 1999-060 | 29 AUG 1893 | DC: Anacostia, SE, Anacostia River, 11th Street Bridge (formerly Navy Yard Bridge) | 1 adult ♀ (USNM 154436), shot from a flock of 3 or 4 | yes | Accepted |
| 1999-059 | 30 AUG 1893 | DC: Capitol Hill | 1 adult ♀ (USNM 293176) | yes | Accepted |
| 2014-078 | 17 AUG 1991 | MD: Pelagic Zone, Atlantic Ocean, near Washington Canyon 37° 33.27' N, 74° 07.97' W | 1 | yes | Ready |
| 2014-079 | 14 AUG 1993 | MD: Pelagic Zone, Atlantic Ocean, Poor Man's Canyon | 11 | no | Reviewable |
| 1997-735 | 17 AUG 1997 | MD: Pelagic Zone, Atlantic Ocean, Baltimore Canyon | 1 | no | Accepted |
| 2003-120 | 19 SEP 2003 | DC: Potomac River, between Memorial Bridge and the 14th Street Bridge | 1 | no | Unreviewable |
| 2010-165 | 03 JUL 2004 | MD: Pelagic Zone, Atlantic Ocean, 38° 02.5' N, 70° 39.97' W | 1 | ? | Retracted |
| 2010-004 | 13 JUL 2006 | MD: Scotland, St. Mary's County, Chesapeake Bay | 1 | no | Ready |
| 2007-092 | 24 AUG 2007 | MD: Pelagic Zone, Atlantic Ocean 38° 13.468' N, 73° 16.131' W | 1 | yes | Ready |
| 2010-145 | 15 AUG 2010 | MD: Pelagic Zone, Atlantic Ocean 38° 26' 41.83" N, 73° 21' 05.80" W | 3 | yes | Ready |
| 2010-148 | 19 AUG 2010 | MD: Pelagic Zone, Atlantic Ocean | 5 | yes | Ready |
| 2012-080 | 25 AUG 2012 | MD: Pelagic Zone, Atlantic Ocean | 128 | yes | Ready |
| 2013-033 | 30 JUL 2013 | MD: Pelagic Zone, Atlantic Ocean | 18 | no | Reviewable |
| 2013-034 | 30 JUL 2013 | MD: Pelagic Zone, Atlantic Ocean | 6 | no | Reviewable |
| 2013-048 | 31 JUL 2013 | MD: Pelagic Zone, Atlantic Ocean | 2 | no | Reviewable |
| 2013-053 | 31 JUL 2013 | MD: Pelagic Zone, Atlantic Ocean | 1 | no | Reviewable |
| 2013-055 | 31 JUL 2013 | MD: Pelagic Zone, Atlantic Ocean | 2 | no | Reviewable |
| 2013-058 | 31 JUL 2013 | MD: Pelagic Zone, Atlantic Ocean | 4 | no | Reviewable |
| 2013-059 | 17 AUG 2013 | MD: Pelagic Zone, Atlantic Ocean | 40 | yes | Ready |
| 2013-061 | 17 AUG 2013 | MD: Pelagic Zone, Atlantic Ocean | 1 | pending | Reviewable |
| 2013-063 | 17 AUG 2013 | MD: Pelagic Zone, Atlantic Ocean | 1 | no | Unreviewable |
| 2014-057 | 23 AUG 2014 | MD: Pelagic Zone, Atlantic Ocean | 22 | yes | Ready |
| 2016-033 | 04 JUN 2016 | MD: Pelagic Zone, Atlantic Ocean | 1 | yes | Ready |
| 2016-037 | 21 AUG 2016 | MD: Pelagic Zone, Atlantic Ocean | 81 | yes | Ready |
| 2018-003 | 20 AUG 2017 | MD: Pelagic Zone, Atlantic Ocean | 25 | yes | Ready |



Figure 2: Presumed adult "Grant's" [Band-rumped] Storm-Petrel.

Photographed in late August when early stage inner primary molt occurs in Monteiro's and any stage primary molt could occur in Cape Verde. The wings of "Grant's" typically are long and narrow with a weak carpal bar that fades toward the joint. The tail is long with no apparent notch and the rump band is narrow (but can show some variability). An adult Monteiro's, which could have a tail notch of any depth, has a prominent carpal bar that extends to the joint and a smaller body than "Grant's". A hot-season Madeiran would have shorter wings and tail with a chunkier body (Figure 3). Comparison with nearby Wilson's Storm-Petrels is helpful as Grant's and Monteiro's are noticeably larger and Madeiran is somewhat closer in size. When not in powered flight, the hand of all BANP can be broader and less pointed. Photographed by Paul Guris on 25 August 2012.



Figure 3: Presumed adult hot-season Madeiran [Band-rumped] Storm-Petrel with all fresh primaries. Photographed in June when adult “Grant’s” and some but not all Cape Verde should be exhibiting primary molt. Adult Monteiro’s would also be fully molted, but longer winged with a prominent carpal bar that extends to the joint and typically but not necessarily have a pronounced tail notch. The wings and tail of Madeiran are shorter than “Grant’s” (Figure 2). The pale carpal bar falls short of the joint. The rump band is similar to that of “Grant’s” but often shows scattered black flecks or a faint dusky dividing line. A bird in this plumage in August would be extremely difficult to differentiate from “Grant’s”, except perhaps on size and rump band markings. To complicate matters, the primary molt schedules of juveniles and non-breeding adults of any population are not known. Photographed by Alex Lamoreaux on 4 June 2016.

little or no tail notch, a narrow rump band, and a pale carpal bar that does not extend as far as the joint. The lone June trip found a possible hot-season Madeiran Storm-Petrel that exhibited no wing molt, shorter wings and tail than in “Grant’s”, a slight tail notch, and a narrow rump band with scattered black flecks. (Figure 3) This distribution of presumed “Grant’s” and possible hot-season Madeiran is as expected given the ratio seen by Howell et al. (2010) off of Hatteras. No molting birds were photographed, which should also rule out most Cape Verde and adult Monteiro’s. Table 2 summarizes the reports submitted to the MD/DC Records Committee from the observers on various pelagic trips in Maryland waters.

One other June trip in 1986 came across a storm-petrel at Poor Man’s Canyon that was the first BANP that either Brian Patteson or I had ever seen, but it was not photographed to my knowledge. The bird glided directly beneath the bow pulpit. It was brown with long wings that were uniformly broad from base to a somewhat rounded tip and showed no obvious sign of molt. The shape was similar to the bird in Howell (2010, figure 23). The rump band was even-edged with a slight cream color and the tail had a pronounced notch as seen from directly above. The seas were calm with little wind, and the bird flew about 0.6 m (2 ft) above the surface with accipiter-like flapping and gliding. It is possible that this was a Monteiro’s Storm-Petrel, but we will never know for sure.

The Smithsonian collection contains two hurricane-related BANP from the District of Columbia: USNM 154436 and USNM 293176 collected on 29 and 30 August, respectively, in 1893 (Table 3). Both were females with fresh primaries, narrow rump bands (2.0–2.5 cm [0.8–1.0 in] and 1.5 cm [0.6 in], respectively), and shallow tail notches (3–4 mm [0.1–0.2 in] and 1–2 mm [0.0–0.1 in], respectively). A similar, although male, specimen (USNM 567674) was collected by Richard A. Rowlett in Delaware on 14 August 1975 (rump band 2 cm [0.8 in], tail notch 3–4 mm [0.1–0.2 in]). All three appear to be presumed “Grant’s” but require further morphometric study.

SUMMARY

As far as identification of BANP forms in Maryland waters, there is no evidence of Cape Verde and only a single sighting of a bird that might possibly have been a Monteiro’s Storm-Petrel. cursory examination of museum specimens collected in Delaware and the District of Columbia suggests that they are presumed “Grant’s”. Many of the digital photographs submitted to the MD/DC Records Committee show characteristics consistent with “Grant’s” and similar to the presumed “Grant’s” documented by Howell et al. (2010) out of Hatteras, North Carolina. Similarly, a single spring BANP photo shows characteristics consistent with the possible hot-season Madeiran that comprises 10–20% of the BANP seen off Hatteras (Howell et al. 2010). More trips, particularly in the

spring, could produce more convincing evidence, given the high quality of the digital photos submitted to the Maryland/District of Columbia Records Committee in recent years. If further taxonomic changes should be forthcoming, a collection of such photos could be an important addition to the literature and expand our knowledge of the Maryland avifauna.

Table 3. Band-rumped Storm-Petrel specimens from the United States Mid-Atlantic region housed at the Division of Birds, National Museum of Natural History, Smithsonian Institution, Washington, DC (NMNH 2018).

| Catalog Number | Sex | Preparation | Collection Location | Collection Date | Collector |
|----------------|------------|---|--|-----------------|----------------------|
| USNM 154436 | ♀ adult | skin: whole | Navy Yard Bridge, District of Columbia | 29 AUG 1893 | W. Palmer |
| USNM 293176 | ♀ adult | skin: whole | Capitol Hill, District of Columbia | 30 AUG 1893 | W. Palmer |
| USNM 566873 | ♀ | skin: whole | Morehead City, Carteret County, North Carolina | 1971 | J.O. Fussell |
| USNM 567674 | ♂ | skin: whole | 72 miles east of Rehoboth Beach, Delaware | 14 AUG 1975 | R.A. Rowlett |
| USNM 602013 | ♀ | skin: whole; mixed tissue sample, frozen (Birds 10K Genome) | Nelson County, Virginia | 18 SEP 2004 | A. Hale, B. Fiske |

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First Record of Masked Booby (*Sula dactylatra*) in Maryland

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On 21 August 2016, a *See Life Paulagics* trip, aboard the *Thelma Dale IV*, was off the continental shelf, east-southeast of Ocean City, Maryland. At 0621 hours, as we were moving in a southwest direction, a sulid was noted moving from the south to the northeast on the port side. The bird was seen well and photographed until 0622, at which point the distance and lighting conditions prevented further physical documentation. The bird was observed during our chum drift (chum and fish oils were liberally dispersed to attract tubenoses and other birds shortly after the vessel's arrival to deep water), though it did not change direction to investigate the chum or commotion of the other birds therein and continued on its course with purpose. The bird was in more or less direct flight the entire time of observation.

Immediately upon sighting the bird, the striking white and black plumage was evident and finer details were noted as the bird passed closer by the observers. The black primaries and secondaries, black rectrices, and dark facial skin were evident; the latter was particularly striking and was apparent in many of the photos. Review of the photos confirmed that the black in the wing extended into the tertials (Figure 1). From underneath, the black of the primaries, secondaries, and tertials formed a strongly demarcated line with the white wing lining (Figure 2). The trailing edge of the upperwing was extensively dark owing to the bird's black primaries, primary coverts, secondaries, and secondary coverts (Figure 1) with a strong demarcation between that and the white forewing. The plumage indicated an adult, or near adult Masked Booby (*Sula dactylatra*). Black-tailed, white morph Red-footed Booby (*S. sula*) was ruled out by the bird's dark tertials (Red-footed have white tertials) and by the presence of dark facial skin. No plumage of subadult Northern Gannet (*Morus bassanus*) shows the combination of black primaries and secondaries with dark facial skin. The separation of Nazca Booby (*S. granti*) from Masked Booby is very difficult, however, no vibrant orange coloration (indicative of Nazca) was noted in the bill. Nazca Booby is a Pacific Ocean species and there are no records of it ever having occurred in the North Atlantic Ocean (eBird 2018).



Figure 1. Masked Booby, *Sula dactylatra*. Note the extensively dark trailing edge of the upperwing owing to the bird's black primaries, primary coverts, secondaries, secondary coverts, and extending into the tertials. Also note the strongly contrasting demarcation with the white forewing. Photographed on 21 August 2016 by Thomas Ford-Hutchinson.



Figure 2. Masked Booby. Note the black of the primaries, secondaries, and tertials on the underside of the wing form a strongly demarcated line with the white wing lining. Photographed on 21 August 2016 by Lutmerding.

The location was approximately 38° 09' 09.9" N, 73° 24' 35.6" W (Figure 3). This location is 147.3 km (91.5 mi) from Ocean City and approximately 24.9 km (15.5 mi) off the continental shelf edge at a depth of just over 1000 fathoms (6,000 ft) of water. Beginning in 2012, overnight trips, run by *See Life Paulagics*, have been visiting this area. Prior to 2012, most Maryland pelagic trips focused on Baltimore Canyon at the immediate shelf edge. Once the trips began venturing off the shelf edge and spending more time farther out in deeper water, Band-rumped Storm-Petrels (*Oceanodroma castro*) became regular, often common (personal observations). These trips have also recorded multiple Black-capped Petrels (*Pterodroma hasitata*) and a Trindade Petrel (*Pterodroma arminjoniana*) (personal observations). Clearly, birds more typical of the Gulf Stream are regular in the area.

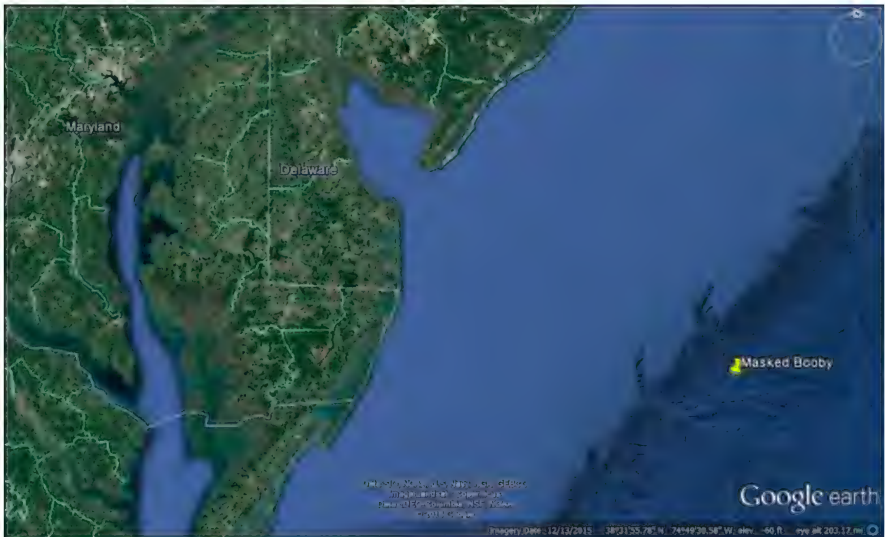


Figure 3. Location of Maryland's first Masked Booby. Map adapted from Data SIO, NOAA, U.S. Navy, NGA, GEBCO; Image Landsat / Copernicus; Data LDEO-Columbia, NSF, NOAA (Google 2018).

Masked Booby is a regular visitor in pelagic waters north to North Carolina (eBird 2018). It is seen almost annually on Gulf Stream pelagic trips off North Carolina, with occasional coastal sightings. Sightings range from April to October, but most occur in July and August (LeGrand 2018). More northern sightings are rare, with the Maryland record representing only the fourth record of Masked Booby north of North Carolina (Table 1). A fifth was reported in September 2017 when an injured juvenile was rescued on Cape Cod,

Massachusetts; this bird perished during rehabilitation (Marshall J. Iliff, in litt. 9 February 2018).

Table 1: East Coast Masked Booby records north of North Carolina. Listing is north to south.

| State | Date | Location | Source |
|---------------|------------------------------|--|-----------------------------|
| Massachusetts | 26 SEP 2017 | Cape Cod, Barnstable County | Iliff, in litt. 2018 |
| Massachusetts | 10 SEP 2015 | Atlantis Canyon (pelagic), Dukes County | MARC 2018, eBird 2018 |
| New Jersey | 24 AUG 2001 | Island Beach State Park, Ocean County | NJBRC 2017, eBird 2018 |
| New Jersey | 15 OCT 2015 | 7th Street Seawall (Avalon Seawatch), Cape May County | NJBRC 2017, eBird 2018 |
| Maryland | 21 AUG 2016 (this record) | (pelagic) Worcester County | MD/DCRC 2018, eBird 2018 |

In 2009, many of Maryland’s top birders voted on a “Next 10” list, in an attempt to guess the next species to be added to the state list (Hafner and Hubick 2009). At that time, there was only one record of Masked Booby north of North Carolina, so it was not a popular choice and only received two votes out of 39, placing it forty-second on the overall list. The 21 August 2016 Masked Booby sighting (MD/2016-038) was added to the official list of Maryland birds in 2017.

Given the regularity of Gulf Stream birds on these recent pelagic trips, it is interesting to consider what other first records for Maryland may be found. Gulf Stream trips out of the Outer Banks, North Carolina, have seen Red-billed Tropicbird (*Phaethon aethereus*), Fea’s Petrel (*Pterodroma feae*), Bermuda Petrel (*Pterodroma cahow*), Black-bellied Storm-Petrel (*Fregetta tropica*), and Swinhoe’s Storm-Petrel (*Oceanodroma monorhis*) (Carolina Bird Club 2017). Deep water trips off Cape Cod, Massachusetts, which also see numerous Gulf Stream birds, have added Barolo Shearwater (*Puffinus baroli*) to that list (MARC 2018). With continued late summer pelagic trips to the deep water off Maryland, we are sure to add more species to the state list.

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**Maryland Christmas Bird Counts (117th CBC)
December 2016 through January 2017:
Corrigendum**

Tables 3 and 4 of the 2016–2017 Maryland Christmas Bird Counts article (Churchill 2017) should show an additional species, Barrow's Goldeneye, (Figure 1).



Figure 1. Barrow's Goldeneye (*Bucephala islandica*). Adult male; Elms Environmental Education Center, St. Mary's County, Maryland; observed by Tyler Bell, David Moulton, and Margarita Rochow on the 18 December 2016 Point Lookout Christmas Bird Count; photographed on 19 December 2016 by David Moulton.

The additional data line in Table 3 (Churchill 2017) should state the following:

| Species | Oakland | Allegany County | Washington County | Catoctin Mountain | Sugarloaf Mountain | Seneca | Triadelphia Reservoir | Rock Run | Bowie | Elkton | Chesterville |
|--------------------|---------|-----------------|-------------------|-------------------|--------------------|--------|-----------------------|----------|-------|--------|--------------|
| Barrow’s Goldeneye | | | | | | | | | | | |

The additional data line in Table 4 (Churchill 2017) should state the following:

| Species | Annapolis-Gibson Island | Middle River | Patuxent River | Jug Bay | Port Tobacco | Point Lookout |
|--------------------|-------------------------|--------------|----------------|---------|--------------|---------------|
| Barrow’s Goldeneye | | | | | | 1 |

LITERATURE CITED

Churchill, J.B. 2017. Maryland Christmas Bird Counts (117th CBC): December 2016 through January 2017. *Maryland Birdlife* 66(2):37–54.

**2017 Maryland Midwinter Bird Count:
Corrigendum**

Table 2 of the 2017 Maryland Midwinter Bird Count article (Fluke 2017) showed incorrect values for “Parties” and “Number of Observers” due to a column shift. The corrected data lines in Table 2 should read as follows:

| | Frederick County | Carroll County | Howard County | Baltimore County | Harford County |
|---------------------|---------------------|-------------------|------------------|---------------------|-------------------|
| Parties | 18 | 16 | 49 | 20 | 7 |
| Number of Observers | 34 | 30 | 75 | 26 | 8 |

LITERATURE CITED

Fluke, M.A. 2017. 2017 Maryland Midwinter Bird Count. *Maryland Birdlife* 66(2):55–59.



“Centennial Lake Buffleheads” by Diane Ford

“The Buffleheads were painted in January 2018 from observations at Centennial Lake, Howard County, Maryland, during the lake’s freeze this winter. The afternoon light on the drakes made them a rainbow of colors and I knew I had to paint them in the company of a lovely hen. The color painting is in acrylic on paper 13" x 18".”

2017 Maryland May Count

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The annual May Count was held on Saturday, 13 May 2017, except the Talbot count was conducted on Sunday, 14 May, in order to provide adequate coverage to both that county and Dorchester. Results were submitted from 22 of Maryland’s 23 counties (Table 1).

Table 1. 2017 Maryland May Count: participating counties, county codes, and compilers. (The dashed line separates the Western and Eastern Shore counts.)

| County | Code | Compiler |
|-----------------|------|--------------------------------|
| Garrett | GA | Nadine Jakubowski |
| Allegany | AL | J.B. Churchill |
| Washington | WA | Mark Abdy |
| Frederick | FR | David Smith |
| Montgomery | MO | Diane Ford |
| Carroll | CA | Don Jewell |
| Howard | HO | Kevin Heffernan, Chuck Stirrat |
| Baltimore | BA | Joel Martin |
| Prince George’s | PG | Fred Fallon |
| Anne Arundel | AA | Dotty Mumford |
| Charles | CH | Lynne Wheeler |
| Calvert | CT | Sherman Suter |
| St. Mary’s | SM | J. Tyler Bell |
| Harford | HA | Rick Cheicante |
| Cecil | CE | Richard Donham |
| Kent | KE | Walter Ellison |
| Talbot | TA | David Palmer |
| Dorchester | DO | Harry Armistead |
| Caroline | CN | Debby Bennett |
| Wicomico | WI | Ellen Lawler |
| Worcester | WO | Marcia Balestri |
| Somerset | SO | Paul Bystrak |

Weather statewide on 13 May was quite unseasonable. It was cool statewide, with lows in the 40s to low 50s °F. Garrett was coolest at 43 °F. Afternoon highs were mostly in the high 50s °F, although it did hit 70 °F in Cecil. Normal lows are in the mid 50s °F (except in Western Maryland) and highs in the mid 70s °F. There was rain in most areas during the morning, except in Harford and Cecil. On the Western Shore, there were mostly showers or light rain, although Howard did report 0.68 inches total. The rain was steady to heavy on the Eastern Shore in the morning, with Somerset reporting 0.7 inches, and then intermittent showers in the afternoon. Most areas were cloudy all day, although some afternoon sun breaks appeared in Western Maryland. Winds were generally fairly light – calm to 15 mph with a few higher gusts, out of the NW to NE.

A total of 416 counters in 285 parties reported 242 species (plus Lawrence's Warbler in Carroll) and 107,942 individual birds (Tables 2 and 3). Total numbers of birds seen were down about 15% from 2016, which was a particularly strong year. Numbers were not significantly lower than the three years prior to 2016.

Among the most notable sightings reported were 20 American Wigeon (Worcester), 106 American Black Duck (2 in Garrett, 1 in Montgomery, 1 in Calvert, 3 in St. Mary's, 5 in Talbot, 38 in Dorchester, and 56 in Somerset), 2 Common Eider (1 each in St. Mary's [Figure 1] and Worcester), 171 Ruddy Duck (reported from 10 counties, including 112 in Dorchester), 17 Black-necked Stilt (2 in Dorchester and 15 in Somerset, compared to 0 in 2016), 1 American Golden-Plover (Kent [Figure 2]), 25 Black Skimmer (Worcester), 287 Brown Pelican (133 in St. Mary's, 5 in Talbot, 143 in Dorchester, and 6 in Somerset), and 15 Yellow-crowned Night-Heron (1 in Calvert, 2 in Howard and 12 in Baltimore) (Tables 4 and 5).

Notable misses this year were Green-winged Teal, Northern Gannet (after a very high 218 seen last year), American Coot, and American Pipit.

Although most shorebirds were present in good numbers, Dunlin were significantly low. Hawk numbers were lower than usual, especially Sharp-shinned and Broad-winged. Flycatchers, with the exception of Eastern Phoebe, were another group present in smaller numbers than usual. Eastern Wood-Pewee and Acadian Flycatcher numbers were particularly low. Vireos were also low. Surprisingly, Tree Swallow numbers were much higher than recent years, while Purple Martins were lower. Warbler numbers were generally lower than last year, especially Common Yellowthroat, Northern Parula, and Prairie Warbler. Indigo Bunting numbers were quite low.

This was a fairly good count, considering the weather.

Table 2. 2017 Maryland May Count: Western Shore summary.

| | GA | AL | WA | FR | MO | CA | HO | BA | PG | AA | CH | CT | SM | HA |
|-------------|---------|------|------|-------|------|------|--------|-------|-------|-------|---------|------|------|------|
| Parties | 23 | 9 | 7 | 15 | 4 | 12 | 54 | 35 | 22 | 17 | 12 | 10 | 10 | 5 |
| Observers | 38 | 9 | 14 | 18 | 4 | 19 | 73 | 41 | 33 | 26 | 19 | 14 | 12 | 25 |
| Start time | 0545 | 0500 | 0445 | 0430 | 0700 | 0630 | 0145 | 0133 | 0545 | 0600 | 0630 | 0615 | 0600 | 0700 |
| Stop time | 2325 | 1900 | 1700 | 2000 | 1830 | 2030 | 2100 | 2009 | 2030 | 1700 | 2045 | 2105 | 1915 | 1700 |
| Driving | | | | | | | | | | | | | | |
| hours | 63.9 | 25.5 | 33.5 | 46.85 | 1 | 26 | 42.2 | | 15.6 | 14.25 | 25.5 | 3.8 | 26 | |
| miles | 451.3 | 168 | 413 | 472.5 | 17 | 311 | 361.6 | | 139.5 | 58 | 257 | 17 | 301 | 15 |
| Walking | | | | | | | | | | | | | | |
| hours | 63.6 | 15 | 18 | 38.53 | 7 | 25.3 | 181.8 | 72 | 87.5 | 32.5 | 41.25 | 36 | 18.5 | 30 |
| miles | 48.4 | 14 | 13.5 | 26.72 | 4.5 | 27 | 132.2 | 61.31 | 72 | 29 | 24 | 27 | 21.3 | 8.5 |
| Other | tractor | | | | | | feeder | | | | bicycle | | | |
| | | | | | | | watch | | | | | | | |
| hours | 1 | | | | | | 18.3 | | | | 3 | | | |
| miles | 7 | | | | | | | | | | 2.5 | | | |
| Owling | | | | | | | | | | | | | | |
| hours | 2 | 1 | 2 | 0.75 | | | 1.6 | | 1 | | 0.5 | | | |
| miles | 27 | | 0.5 | 5 | | | | | 0 | | | | | |
| Stationary | | | | | | | | | | | | | | |
| hours | 19.5 | 3 | 5.5 | 6.95 | | 17.5 | | 11.4 | 5.5 | 17.5 | 14 | 12 | 4.5 | |
| Total | | | | | | | | | | | | | | |
| Species | 166 | 120 | 113 | 131 | 98 | 124 | 136 | 132 | 134 | 115 | 138 | 134 | 136 | 113 |
| Total | | | | | | | | | | | | | | |
| Individuals | 6105 | 2713 | 1268 | 10274 | 790 | 6067 | 14376 | 4925 | 6479 | 3600 | 5842 | 4172 | 4174 | 1284 |

Table 3. 2017 Maryland May Count: Eastern Shore and total summary.

| | CE | KE | TA | DO | CN | SO | WI | WO | Total |
|-------------------|------|------|------|--------|-----------|-------|-------|------|---------|
| Parties | 4 | 1 | 10 | 9 | 13 | 4 | 6 | 3 | 285 |
| Observers | 4 | 2 | 20 | 12 | 14 | 6 | 9 | 4 | 416 |
| Start time | 0545 | 0630 | 0400 | 0330 | 0430 | 0530 | 0553 | 0842 | |
| Stop time | 1827 | 2015 | 2030 | 2100 | 2100 | 1830 | 1700 | 1839 | |
| Driving | | | | | | | | | |
| hours | | 7.25 | 40 | 49 | 35 | 12 | 7.25 | 19 | 493.6 |
| miles | | 42.5 | 282 | 566 | 359 | 131.8 | 135 | 103 | 4601.2 |
| Walking | | | | | | | | | |
| hours | | 15 | 6 | 29 | 24 | 17 | 5.5 | 13.5 | 776.98 |
| miles | | 11 | 3.5 | 12 | 44 | 12 | 5.5 | 4.75 | 602.18 |
| Other | | | | | golf cart | | | | |
| hours | | | | | 1 | | | | 23.3 |
| miles | | | | | 0.5 | | | | 10 |
| Owling | | | | | | | | | |
| hours | | | 3.5 | 6 | | 1 | | | 19.35 |
| miles | | | 50 | 51 | | 2 | | | 135.5 |
| Stationary | | | | | | | | | |
| hours | | 2.5 | 1 | | 12 | 7.3 | 10.25 | | 150.4 |
| Total Species | 114 | 98 | 141 | 167 | 131 | 100 | 93 | 120 | 242 |
| Total Individuals | 1244 | 3376 | 5680 | 10,846 | 7326 | 1741 | 1868 | 3792 | 107,942 |



Figure 1. Common Eider (*Somateria mollissima*). Female; Point Lookout State Park, St. Mary's County, Maryland; observed on 13 May 2017 and photographed on 14 May 2017 by Patty Craig.



Figure 2. American Golden-Plover (*Pluvialis dominica*) with Black-bellied Plovers (*Pluvialis squatarola*). Tolchester, Kent County, Maryland; 13 May 2017; photographed by Nancy Martin.

Table 4. 2017 Maryland May Count: Western Shore observed species.

| Species | GA | AL | WA | FR | MO | CA | HO | BA | PG | AA | CH | CT | SM | HA |
|---------------------------|-----|----|-----|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| Snow Goose | | | | | | | | | | | | | | |
| Canada Goose | 203 | | 152 | 353 | 10 | 387 | 702 | 202 | 207 | 163 | 288 | 69 | 113 | 37 |
| Mute Swan | | | | 1 | | | | | | | | | | |
| Tundra Swan | | | | | | | | | | | | | | |
| Wood Duck | 101 | 16 | 10 | 40 | 13 | 8 | 46 | 21 | 76 | 13 | 47 | 12 | 11 | 2 |
| Blue-winged Teal | 1 | | | | | | | | | | | | | |
| Northern Shoveler | | | | | | | | 2 | | | | | | |
| Gadwall | | | | | | | | | 2 | | | | | |
| American Wigeon | | | | | | | | | | | | | | |
| Mallard | 52 | 15 | 50 | 122 | 3 | 24 | 112 | 95 | 50 | 49 | 60 | 90 | 18 | 5 |
| American Black Duck | 2 | | | | 1 | | | | | | | 1 | 3 | |
| Canvasback | | | | | | | | | | | | | 1 | |
| Redhead | | | | | | | | | | | | | | |
| Ring-necked Duck | 3 | | | 2 | | | | | | | | | | |
| Lesser Scaup | | | | | | | | | | 1 | | | | |
| Common Eider | | | | | | | | | | | | | 1 | |
| Surf Scoter | | | | | | | | | | | | | | |
| White-winged Scoter | | | | | | | | | | | | | | |
| Black Scoter | | | | | | | | | | | | | 1 | |
| Bufflehead | | | | | | | | | | 3 | | | | |
| Hooded Merganser | 1 | | | | 8 | | 1 | | 1 | | 3 | | | |
| Common Merganser | 5 | | | 1 | 2 | | | | | | | | | |
| Red-breasted Merganser | | 1 | | | | | | | | | 6 | | | |
| Ruddy Duck | 6 | 2 | 5 | | | | | 17 | | | 8 | 8 | | |
| duck sp. | | | | | | | | | | | | | | |
| Northern Bobwhite | | 1 | | | | | | | | | 2 | | 1 | |
| Ruffed Grouse | 5 | 2 | | | | | | | | | | | | |
| Wild Turkey | 40 | 3 | 11 | 4 | | | 7 | 9 | 7 | | 48 | | | |
| Pied-billed Grebe | | | | | 1 | | | | | | | | | |
| Horned Grebe | | | | | | | | | | | | | 1 | |
| Rock Pigeon | 34 | 85 | 55 | 117 | | 70 | 55 | 67 | 94 | 4 | 2 | 7 | 12 | 17 |
| Mourning Dove | 111 | 71 | 117 | 350 | 24 | 184 | 343 | 105 | 108 | 91 | 160 | 103 | 84 | 30 |
| Yellow-billed Cuckoo | 1 | 4 | | 2 | 1 | | 1 | 3 | 4 | 1 | 2 | 1 | | 3 |
| Black-billed Cuckoo | 7 | 1 | | 1 | | | | 1 | | | | | | |
| Common Nighthawk | | | | | 1 | | 3 | | | | | | | |
| Chuck-will's-widow | | | | | | | | | | | | 1 | | |
| Eastern Whip-poor-will | 1 | 1 | 2 | | | | | | | | | | | |
| Chimney Swift | 13 | 68 | 49 | 123 | 33 | 64 | 159 | 207 | 88 | 30 | 111 | 53 | 6 | 19 |
| Ruby-throated Hummingbird | 26 | 9 | 3 | 11 | 1 | 4 | 19 | 8 | 4 | 8 | 9 | 6 | 6 | 1 |
| Clapper Rail | | | | | | | | | | | | | | |
| King Rail | | | | | | | | | | 2 | | | | |
| Virginia Rail | 3 | | | | | | | | | | | 1 | | |
| Sora | 1 | | | | | | 1 | | | | | | | |
| Common Gallinule | | | 1 | | | | | | | | | | | |
| Sandhill Crane | 1 | | | | | | | | | | | | | |
| Black-necked Stilt | | | | | | | | | | | | | | |
| American Oystercatcher | | | | | | | | | | | | | | |
| Black-bellied Plover | 3 | | | | | | | | | | | | 29 | |
| American Golden-Plover | | | | | | | | | | | | | | |
| Semipalmated Plover | | | | | | | | | | | | 1 | 15 | |

| Species | GA | AL | WA | FR | MO | CA | HO | BA | PG | AA | CH | CT | SM | HA |
|----------------------------|----|----|----|-----|----|----|-----|-----|----|----|-----|----|-----|----|
| Killdeer | 14 | 10 | 4 | 19 | | 4 | 24 | 1 | 8 | 6 | 12 | 5 | 11 | |
| Ruddy Turnstone | 1 | | | | | | | | | | | | | |
| Sanderling | | | | | | | | | | | | | | |
| Dunlin | | | | | | | | | | | | | 3 | |
| Least Sandpiper | 4 | 2 | | 2 | | | | | 16 | | 1 | 6 | 12 | 1 |
| White-rumped Sandpiper | 3 | | | | | | | | | | | | | |
| Pectoral Sandpiper | | | | | | | | | 1 | | | | | |
| Semipalmated Sandpiper | 6 | | | | | | | | 3 | | | | 38 | |
| sandpiper sp. | | | | | | | | | | | | | | |
| Short-billed Dowitcher | 39 | | | | | | | | | | | | | |
| Long-billed Dowitcher | 1 | | | | | | | | | | | | | |
| American Woodcock | 3 | 1 | 2 | | | | | | | | 3 | | | |
| Wilson's Snipe | | | | | | | | | | | | | | |
| Spotted Sandpiper | 30 | 15 | 9 | 4 | 1 | 2 | 6 | 14 | 10 | | 4 | 8 | 4 | 3 |
| Solitary Sandpiper | 10 | 4 | 2 | 12 | 3 | 3 | 55 | 2 | 17 | 8 | 5 | 2 | 3 | |
| Lesser Yellowlegs | 8 | 2 | | 1 | | | 1 | | | | | | | |
| Willet | | | | | | | | | 3 | | | | | |
| Greater Yellowlegs | 7 | 2 | | | | | | | | | | | 9 | |
| yellowlegs sp. | | | | | | | | | | | | | | |
| Bonaparte's Gull | 5 | 1 | | | | | | 1 | | | | | 1 | |
| Laughing Gull | | | | | | | | | 2 | | 6 | 9 | 283 | |
| Ring-billed Gull | 1 | 28 | | | | | | 165 | | 20 | | 55 | 34 | |
| Herring Gull | | | | | | | | 11 | | | 19 | 8 | 13 | |
| Lesser Black-backed Gull | | | | | | | | | | | | | | |
| Great Black-backed Gull | | | | | | | | 1 | | 7 | | 19 | 19 | |
| gull sp. | | | | | | | | | | 1 | | | 4 | |
| Least Tern | | | | | | | | 5 | | | | | | |
| Caspian Tern | | | | | | | | 1 | | 1 | 5 | 1 | 4 | |
| Black Tern | | | | | | | | | | | | | | |
| Common Tern | 1 | | | | | | | | | | 3 | | 3 | |
| Forster's Tern | 1 | | | | | | | | 1 | 1 | 7 | 7 | 3 | |
| Royal Tern | | | | | | | | | | | | 6 | 7 | |
| Black Skimmer | | | | | | | | | | | | | | |
| Common Loon | 5 | 2 | 1 | | | | | | | | 1 | 1 | 3 | |
| Double-crested Cormorant | 14 | | 12 | 6 | 2 | 6 | 7 | 53 | 25 | 18 | 124 | 37 | 381 | 2 |
| American White Pelican | | | | | | | | | | | | | | |
| Brown Pelican | | | | | | | | | | | | | 133 | |
| American Bittern | 1 | | | | | | | | | | | | | |
| Least Bittern | | | | | | | | 1 | | | | | | |
| Great Blue Heron | 4 | 1 | 9 | 24 | 2 | 7 | 32 | 12 | 21 | 38 | 31 | 19 | 48 | 4 |
| Great Egret | | | | 2 | | 1 | 3 | 1 | 1 | 1 | 2 | 1 | 5 | |
| Snowy Egret | | | | | | | | | | 6 | | 8 | 5 | |
| Little Blue Heron | | | | | | | | 6 | | | | | | |
| Tricolored Heron | | | | | | | | | | | | | | |
| Cattle Egret | | | | | | | | | | | | 1 | | |
| Green Heron | 5 | 5 | 2 | 7 | 4 | 1 | 27 | 7 | 17 | 2 | 6 | 9 | 2 | 1 |
| Black-crowned Night-Heron | | | | 14 | | | | 6 | 1 | | | | | |
| Yellow-crowned Night-Heron | | | | | | 1 | 2 | 12 | | | | | | |
| Glossy Ibis | | | | | | | 1 | | | | | | | |
| Black Vulture | 5 | 2 | 19 | 62 | | 86 | 136 | 26 | 49 | 44 | 180 | 33 | 47 | 5 |
| Turkey Vulture | 68 | 18 | 66 | 146 | 9 | 69 | 149 | 28 | 85 | 34 | 145 | 85 | 67 | 22 |
| Osprey | 5 | | 1 | 3 | 2 | 1 | 38 | 29 | 51 | 39 | 254 | 62 | 50 | 4 |
| Bald Eagle | 6 | 2 | 3 | 5 | 1 | 6 | 9 | 11 | 21 | 6 | 85 | 13 | 11 | 3 |

| Species | GA | AL | WA | FR | MO | CA | HO | BA | PG | AA | CH | CT | SM | HA |
|--------------------------|-----|-----|-----|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| Northern Harrier | | | | 1 | | | | | | | | 1 | | 2 |
| Sharp-shinned Hawk | | | | | | 1 | | | | | | | | 1 |
| Cooper's Hawk | 2 | | 1 | 5 | | 2 | 5 | 2 | 1 | 1 | 1 | | | |
| Red-shouldered Hawk | 1 | | 7 | 23 | 1 | 3 | 51 | 8 | 17 | 8 | 8 | 5 | 1 | 2 |
| Broad-winged Hawk | 7 | 1 | | | | | 1 | | | 1 | | | | 2 |
| Red-tailed Hawk | 12 | 2 | 9 | 26 | | 13 | 20 | 10 | 20 | 4 | 13 | 4 | 4 | 3 |
| hawk sp. | | | | | | | | | | | | | 1 | |
| Barn Owl | | | | | | | | | | | 12 | | | |
| Eastern Screech-Owl | 1 | | | | | 1 | 2 | | | | 2 | | | 1 |
| Great Horned Owl | | | | 1 | | | 1 | | | | 1 | | | |
| Barred Owl | 5 | | 5 | 6 | 3 | 4 | 2 | 7 | 10 | 3 | 3 | | 1 | 1 |
| Belted Kingfisher | 2 | 2 | 3 | 8 | 2 | 13 | 18 | 5 | 6 | 6 | 5 | 7 | 3 | 2 |
| Red-headed Woodpecker | 8 | | | 12 | | 5 | | 3 | | | 2 | 1 | 2 | |
| Red-bellied Woodpecker | 38 | 34 | 30 | 93 | 20 | 78 | 228 | 49 | 72 | 62 | 45 | 56 | 12 | 7 |
| Yellow-bellied Sapsucker | 7 | | | | | 1 | | | | | 2 | | | |
| Downy Woodpecker | 34 | 15 | 20 | 47 | 11 | 44 | 98 | 33 | 22 | 30 | 15 | 25 | 6 | 5 |
| Hairy Woodpecker | 13 | 4 | 4 | 16 | 5 | 14 | 20 | 4 | 10 | 5 | | 5 | 2 | |
| Downy/Hairy Woodpecker | | | | | | | | | | | | | | 1 |
| Northern Flicker | 47 | 12 | 3 | 11 | 7 | 19 | 37 | 22 | 11 | 11 | 6 | 6 | 2 | 3 |
| Pileated Woodpecker | 18 | 9 | 13 | 23 | 3 | 7 | 52 | 15 | 18 | 11 | 20 | 11 | 1 | 3 |
| American Kestrel | 3 | 2 | | 8 | | 2 | 1 | 1 | 7 | 1 | 1 | 1 | 1 | |
| Merlin | 2 | | | | | | | | | | | | | 1 |
| Peregrine Falcon | | 4 | | | | | | | | | | | | |
| Olive-sided Flycatcher | | | | | | | 1 | | | | | | | |
| Eastern Wood-Pewee | 3 | 4 | 5 | 15 | 1 | 5 | 19 | 7 | 6 | 9 | 11 | 13 | 4 | 4 |
| Acadian Flycatcher | | 1 | 3 | 8 | 7 | 10 | 35 | 2 | 31 | 1 | 22 | 17 | 4 | 1 |
| Alder Flycatcher | 1 | 1 | | | | | | | | | 2 | | | |
| Willow Flycatcher | | 2 | | 1 | 1 | 2 | 2 | | | | | 1 | | 1 |
| Least Flycatcher | 6 | 5 | | 3 | | 1 | 4 | 3 | | | 1 | | | 3 |
| Empidonax sp. | | | | | | 1 | | | | | | | | |
| Eastern Phoebe | 32 | 26 | 16 | 35 | 4 | 38 | 67 | 16 | 18 | 9 | 33 | 20 | 2 | 6 |
| Great Crested Flycatcher | 8 | 11 | 20 | 49 | 11 | 38 | 88 | 20 | 37 | 21 | 34 | 31 | 30 | 3 |
| Eastern Kingbird | 19 | 4 | 21 | 86 | | 45 | 82 | 41 | 65 | | 31 | 14 | 19 | 8 |
| White-eyed Vireo | 2 | 2 | 2 | 10 | | 17 | 29 | 6 | 47 | 12 | 23 | 49 | 7 | 4 |
| Yellow-throated Vireo | 3 | 1 | 6 | 8 | 1 | 4 | 14 | 3 | 19 | 2 | 12 | 13 | 2 | 4 |
| Blue-headed Vireo | 25 | | | 4 | | 1 | 2 | 2 | 5 | 5 | 1 | 3 | | |
| Philadelphia Vireo | 1 | | | | | | | | | | | | | |
| Warbling Vireo | 1 | 7 | 18 | 37 | 3 | 5 | 23 | 19 | 8 | 1 | 2 | 1 | | 1 |
| Red-eyed Vireo | 87 | 69 | 50 | 117 | 7 | 52 | 280 | 38 | 171 | 67 | 88 | 68 | 21 | 3 |
| Blue Jay | 107 | 37 | 57 | 152 | 11 | 138 | 379 | 81 | 65 | 76 | 48 | 54 | 42 | 35 |
| American Crow | 159 | 64 | 114 | 219 | 15 | 167 | 479 | 89 | 93 | 104 | 224 | 129 | 92 | 46 |
| Fish Crow | | 2 | 12 | 71 | 1 | 40 | 63 | 16 | 32 | 10 | 15 | 16 | 9 | 3 |
| crow sp. | | | | 44 | | | 210 | 10 | | 13 | | 1 | 5 | |
| Common Raven | 21 | 11 | 3 | 5 | | 1 | 6 | | 1 | | 1 | | | |
| Horned Lark | | | 10 | 15 | | 11 | 25 | | 3 | | | 5 | | 2 |
| Purple Martin | 2 | | 21 | 27 | 3 | 18 | 55 | 41 | 15 | | 163 | 46 | 31 | 8 |
| Tree Swallow | 154 | 49 | 65 | 192 | 6 | 294 | 239 | 76 | 490 | 33 | 73 | 40 | 12 | 58 |
| N. Rough-winged Swallow | 19 | 47 | 19 | 123 | 7 | 33 | 127 | 69 | 54 | 11 | 10 | 20 | 2 | 8 |
| Bank Swallow | 30 | 13 | | 10 | | 1 | | 3 | 11 | | | 4 | | |
| Cliff Swallow | 16 | 10 | 23 | 6 | | 39 | 10 | | 12 | | | | | |
| Barn Swallow | 338 | 145 | 88 | 364 | 16 | 304 | 371 | 122 | 227 | 237 | 192 | 193 | 171 | 62 |
| Carolina Chickadee | | | 32 | 138 | 17 | 83 | 261 | 84 | 92 | 89 | 86 | 87 | 40 | 9 |
| Black-capped Chickadee | 120 | 20 | 2 | | | | | | | | | | | |

| Species | GA | AL | WA | FR | MO | CA | HO | BA | PG | AA | CH | CT | SM | HA |
|-------------------------|-----|-----|-----|------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Tufted Titmouse | 71 | 50 | 48 | 99 | 9 | 92 | 277 | 47 | 96 | 91 | 107 | 77 | 47 | 13 |
| Red-breasted Nuthatch | 5 | | | | | | | | | | 1 | | | |
| White-breasted Nuthatch | 29 | 22 | 12 | 34 | 7 | 44 | 73 | 20 | 15 | 16 | 9 | 18 | 3 | 4 |
| Brown-headed Nuthatch | | | | | | | | | | | 2 | 5 | 4 | |
| Brown Creeper | 11 | 1 | | | | | | | | 1 | 1 | | | |
| House Wren | 63 | 16 | 17 | 66 | 6 | 62 | 119 | 47 | 9 | 12 | 4 | 5 | | 5 |
| Winter Wren | 3 | | | | | | | | | | | | | |
| Marsh Wren | 2 | | | | | | | 3 | 3 | 1 | 4 | 1 | 1 | |
| Carolina Wren | 26 | 45 | 47 | 178 | 21 | 78 | 313 | 57 | 127 | 59 | 120 | 95 | 30 | 8 |
| Blue-gray Gnatcatcher | 23 | 10 | 13 | 81 | 12 | 48 | 186 | 82 | 143 | 82 | 60 | 41 | 9 | 2 |
| Golden-crowned Kinglet | 5 | | | | | | | | | | | | | |
| Ruby-crowned Kinglet | 2 | 1 | | | | 1 | | 1 | | 1 | | 1 | | |
| Eastern Bluebird | 35 | 20 | 69 | 147 | 2 | 101 | 212 | 56 | 92 | 49 | 110 | 71 | 28 | 22 |
| Veery | 2 | | | 5 | 1 | 26 | 8 | 7 | 8 | | | 14 | 2 | 1 |
| Gray-cheeked Thrush | | | | 1 | | | | | 1 | | | 1 | 1 | |
| Swainson's Thrush | 2 | 2 | 1 | 7 | 2 | 9 | 16 | 10 | 9 | 2 | 1 | 4 | | 1 |
| Hermit Thrush | 10 | | | | | 1 | | | | | 1 | | | |
| Wood Thrush | 23 | 14 | 37 | 118 | 16 | 74 | 195 | 26 | 86 | 29 | 39 | 44 | 13 | 5 |
| American Robin | 441 | 243 | 193 | 759 | 25 | 271 | 597 | 362 | 194 | 147 | 71 | 78 | 125 | 66 |
| Gray Catbird | 135 | 70 | 76 | 277 | 16 | 321 | 492 | 164 | 71 | 38 | 31 | 39 | 15 | 32 |
| Brown Thrasher | 42 | 24 | 19 | 57 | 1 | 36 | 35 | 5 | 26 | 4 | 31 | 22 | 37 | 2 |
| Northern Mockingbird | 1 | 20 | 59 | 113 | 2 | 55 | 160 | 40 | 43 | 61 | 103 | 45 | 52 | 21 |
| European Starling | 247 | 166 | 361 | 1186 | 6 | 445 | 805 | 291 | 315 | 192 | 296 | 191 | 166 | 134 |
| Cedar Waxwing | 4 | 9 | 6 | 76 | 42 | 36 | 224 | 35 | 155 | 55 | 121 | 25 | 43 | 4 |
| House Sparrow | 55 | 95 | 53 | 278 | 22 | 104 | 285 | 185 | 63 | 38 | 64 | 56 | 76 | 29 |
| House Finch | 30 | 46 | 40 | 145 | 9 | 120 | 168 | 76 | 58 | 49 | 45 | 48 | 37 | 8 |
| Purple Finch | 18 | | | 5 | 1 | 3 | 2 | | 1 | 2 | | | | 1 |
| Pine Siskin | 1 | | | | | | | | | | | | | |
| American Goldfinch | 197 | 106 | 127 | 295 | 38 | 234 | 415 | 112 | 89 | 94 | 122 | 91 | 13 | 6 |
| Eastern Towhee | 138 | 29 | 36 | 67 | 1 | 45 | 142 | 15 | 54 | 11 | 26 | 34 | 10 | 5 |
| Chipping Sparrow | 144 | 54 | 67 | 210 | 2 | 116 | 300 | 76 | 114 | 85 | 132 | 109 | 61 | 24 |
| Field Sparrow | 51 | 17 | 38 | 65 | | 21 | 45 | 16 | 13 | 6 | 20 | 12 | 5 | 3 |
| Vesper Sparrow | 1 | | | | | 1 | | | | | | | | |
| Savannah Sparrow | 6 | 1 | | | | | 33 | 7 | 18 | | 8 | 5 | 3 | 15 |
| Grasshopper Sparrow | 1 | 3 | 11 | 21 | | 4 | 27 | 3 | 10 | 4 | 14 | 9 | 23 | 1 |
| Henslow's Sparrow | 1 | | | | | | | | | | | | | |
| Saltmarsh Sparrow | | | | | | | | | | | | | | |
| Seaside Sparrow | | | | | | | | | | | | | 1 | |
| Song Sparrow | 161 | 64 | 24 | 164 | 10 | 92 | 138 | 30 | 26 | 50 | 5 | 20 | 23 | 14 |
| Lincoln's Sparrow | 2 | 1 | | | 1 | | | 1 | | | | | | 2 |
| Swamp Sparrow | 27 | | | | | | 4 | 15 | 11 | 3 | 2 | 7 | 2 | 1 |
| White-throated Sparrow | 6 | | | 12 | 1 | 40 | 80 | 22 | 31 | 11 | 1 | 4 | 1 | 1 |
| White-crowned Sparrow | 6 | 10 | | 4 | | 1 | 5 | 4 | | 1 | | 1 | | |
| Dark-eyed Junco | 6 | | | | | | | | | | | | | |
| Yellow-breasted Chat | 2 | 2 | 19 | 6 | | 1 | 8 | | 12 | 4 | 11 | 8 | 7 | 1 |
| Bobolink | 73 | 4 | 3 | 5 | | 4 | 57 | 25 | 40 | 22 | 11 | 42 | 8 | 19 |
| Eastern Meadowlark | 18 | 7 | 12 | 40 | | 6 | 15 | 9 | 10 | 5 | 8 | 9 | 31 | 1 |
| Orchard Oriole | 5 | 9 | 6 | 33 | 3 | 12 | 41 | 21 | 49 | 13 | 25 | 15 | 6 | 1 |
| Baltimore Oriole | 105 | 16 | 51 | 80 | 7 | 46 | 107 | 41 | 24 | 5 | 6 | 2 | | 8 |
| Red-winged Blackbird | 398 | 115 | 21 | 571 | 48 | 184 | 626 | 181 | 427 | 189 | 276 | 232 | 210 | 59 |
| Brown-headed Cowbird | 16 | 20 | 35 | 111 | 6 | 63 | 210 | 61 | 116 | 47 | 60 | 69 | 42 | 8 |
| Rusty Blackbird | | 8 | | | | | | | | | 2 | | 1 | |
| Common Grackle | 182 | 110 | 217 | 443 | 26 | 113 | 167 | 85 | 143 | 167 | 263 | 260 | 628 | 39 |

| Species | GA | AL | WA | FR | MO | CA | HO | BA | PG | AA | CH | CT | SM | HA |
|------------------------------|-----|-----|-----|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| Boat-tailed Grackle | | | | | | | | | | | | | | |
| blackbird sp. | | | | 8 | | | | | | | | | 3 | |
| Ovenbird | 97 | 18 | 10 | 50 | 11 | 42 | 192 | 27 | 111 | 20 | 60 | 32 | 23 | 4 |
| Worm-eating Warbler | 1 | 5 | 5 | 5 | 1 | 5 | 13 | 1 | 4 | 2 | 3 | 2 | 4 | 4 |
| Louisiana Waterthrush | 2 | 5 | 3 | 11 | | 7 | 38 | 5 | 10 | 2 | 13 | 8 | 3 | 3 |
| Northern Waterthrush | 18 | 3 | 2 | 5 | 11 | 3 | 13 | 10 | 13 | | 2 | 3 | 1 | 8 |
| waterthrush sp. | | | | | | | | | | | | 3 | | |
| Golden-winged Warbler | 2 | | | | | | | | | | | | | |
| Lawrence's Warbler | | | | | | 1 | | | | | | | | |
| Blue-winged Warbler | 3 | | 4 | | | 1 | 4 | 3 | 9 | | | | | 1 |
| Black-and-white Warbler | 28 | | 7 | 15 | 7 | 13 | 78 | 35 | 27 | 8 | 10 | 5 | | 8 |
| Prothonotary Warbler | 2 | | | 9 | 3 | | 1 | 1 | 3 | 9 | 7 | 1 | | 5 |
| Tennessee Warbler | 5 | 2 | | | 2 | | 2 | 1 | | | | 1 | | |
| Nashville Warbler | 3 | | | | | | 3 | | 2 | 2 | | | | |
| Mourning Warbler | | | | | | 1 | 2 | | | | | | | |
| Kentucky Warbler | 1 | | 1 | | | | 4 | 1 | 1 | 1 | 3 | 6 | 6 | 4 |
| Common Yellowthroat | 174 | 29 | 25 | 70 | 6 | 93 | 254 | 57 | 121 | 27 | 82 | 105 | 26 | 24 |
| Hooded Warbler | 10 | 5 | 5 | 8 | | 3 | 2 | | 10 | 4 | 30 | 22 | 2 | |
| American Redstart | 56 | 6 | 2 | 24 | 7 | 15 | 110 | 37 | 66 | 14 | 17 | 13 | 5 | 4 |
| Cape May Warbler | 6 | 1 | | 5 | | | 3 | 2 | 2 | | 2 | | 2 | 2 |
| Cerulean Warbler | 12 | | 1 | 1 | | | | | | | | | | 9 |
| Northern Parula | 13 | 3 | 4 | 29 | 8 | 18 | 141 | 23 | 73 | 16 | 49 | 50 | 10 | 2 |
| Magnolia Warbler | 20 | 1 | | 12 | 2 | 4 | 17 | 16 | 16 | 5 | 2 | 3 | 2 | 7 |
| Bay-breasted Warbler | 3 | | 1 | 2 | 1 | 5 | 1 | 2 | 2 | | | | | |
| Blackburnian Warbler | 26 | 3 | 1 | 7 | | 1 | 4 | 2 | 2 | 4 | 1 | | | 7 |
| Yellow Warbler | 75 | 25 | 7 | 50 | 5 | 25 | 91 | 34 | 29 | 5 | 10 | 18 | 8 | 9 |
| Chestnut-sided Warbler | 70 | 4 | 7 | 14 | 2 | | 21 | 1 | 10 | | | 1 | 3 | 4 |
| Blackpoll Warbler | 5 | | 1 | 13 | 4 | 7 | 27 | 8 | 6 | 3 | 20 | 20 | 2 | 7 |
| Black-throated Blue Warbler | 24 | | 4 | 31 | 7 | 16 | 63 | 14 | 18 | 8 | 9 | 11 | 1 | 5 |
| Palm Warbler | | | | | 1 | 2 | 3 | 4 | | | | | | |
| Pine Warbler | | 2 | 6 | 5 | | 4 | 4 | | 18 | | 15 | 9 | 8 | 1 |
| Yellow-rumped Warbler | 36 | 6 | 2 | 19 | 11 | 51 | 143 | 84 | 55 | 5 | 22 | 9 | | 24 |
| Yellow-throated Warbler | 2 | | 2 | 1 | | | 1 | | 2 | | 6 | 7 | 4 | 2 |
| Prairie Warbler | | 2 | 14 | 4 | | | 16 | 1 | 8 | 2 | 13 | 4 | 4 | |
| Black-throated Green Warbler | 53 | 5 | 7 | 26 | 3 | 8 | 22 | 10 | 19 | 3 | 2 | 8 | 2 | 4 |
| Canada Warbler | 3 | | | 2 | 1 | | 5 | 3 | 2 | | | 1 | 1 | 7 |
| Wilson's Warbler | 1 | 1 | | 1 | 2 | 1 | 5 | 3 | | | | 4 | | 6 |
| warbler sp. | | | | | | | | | | | | | 1 | |
| Summer Tanager | | | | | | | | | 16 | 1 | 10 | 19 | 5 | |
| Scarlet Tanager | 66 | 30 | 18 | 52 | 7 | 92 | 109 | 79 | 67 | 28 | 46 | 20 | 6 | 9 |
| Northern Cardinal | 100 | 100 | 133 | 459 | 53 | 250 | 853 | 161 | 207 | 257 | 219 | 180 | 133 | 80 |
| Rose-breasted Grosbeak | 72 | 5 | 5 | 12 | 3 | 18 | 20 | 4 | 8 | 7 | 5 | 4 | 5 | 4 |
| Blue Grosbeak | | | | 5 | | 1 | 12 | | 35 | 5 | 24 | 16 | 24 | 1 |
| Indigo Bunting | 63 | 32 | 47 | 107 | 4 | 47 | 166 | 19 | 133 | 77 | 93 | 85 | 79 | 6 |
| Dickcissel | | | | 1 | | 3 | | | 2 | | 2 | | | |

Table 5. 2017 Maryland May Count: Eastern Shore and total observed species.

| Species | CE | KE | TA | DO | CN | SO | WI | WO | Total |
|---------------------------|----|-----|-----|-----|-----|----|-----|-----|-------|
| Snow Goose | | | | 1 | | | | 1 | 2 |
| Canada Goose | 17 | 56 | 111 | 291 | 127 | 83 | 125 | 129 | 3825 |
| Mute Swan | | | 1 | | 1 | 5 | | | 8 |
| Tundra Swan | | | | 2 | | | | | 2 |
| Wood Duck | 3 | 10 | 63 | 51 | 26 | | 9 | 6 | 584 |
| Blue-winged Teal | | | | | | | | | 1 |
| Northern Shoveler | | | | | | | | | 2 |
| Gadwall | | | | 2 | | | | 1 | 5 |
| American Wigeon | | | | | | | | 20 | 20 |
| Mallard | 11 | 25 | 75 | 232 | 37 | 9 | 46 | | 1180 |
| American Black Duck | | | 5 | 38 | | 56 | | | 106 |
| Canvasback | | | | 5 | | | | | 6 |
| Redhead | | | | 1 | | | | | 1 |
| Ring-necked Duck | | 1 | | | | | | | 6 |
| Lesser Scaup | | 1 | 2 | 2 | | | | | 6 |
| Common Eider | | | | | | | | 1 | 2 |
| Surf Scoter | | | 67 | 3 | | | | | 70 |
| White-winged Scoter | | | | 1 | | | | | 1 |
| Black Scoter | | | 22 | | | | | | 23 |
| Bufflehead | | | 1 | | | | | 3 | 7 |
| Hooded Merganser | | | | | | | | | 14 |
| Common Merganser | | | | | | | | | 8 |
| Red-breasted Merganser | | | 1 | 3 | | | | | 11 |
| Ruddy Duck | | 2 | | 112 | | 1 | | 10 | 171 |
| duck sp. | | | | 4 | | | | | 4 |
| Northern Bobwhite | | | 3 | 10 | 2 | | 1 | 1 | 21 |
| Ruffed Grouse | | | | | | | | | 7 |
| Wild Turkey | 7 | 11 | 30 | 50 | 38 | | 11 | 7 | 283 |
| Pied-billed Grebe | | | | | | | | | 1 |
| Horned Grebe | | | | | | | | | 1 |
| Rock Pigeon | | 1 | 9 | 20 | 68 | 5 | 6 | 1 | 729 |
| Mourning Dove | 13 | 51 | 82 | 117 | 143 | 21 | 47 | 10 | 2365 |
| Yellow-billed Cuckoo | 2 | | 4 | 4 | 2 | | 1 | 4 | 40 |
| Black-billed Cuckoo | | | | | | | | | 10 |
| Common Nighthawk | 1 | | | | 1 | | | | 6 |
| Chuck-will's-widow | | | 7 | 7 | | 1 | | | 16 |
| Eastern Whip-poor-will | | | | | 2 | | | | 6 |
| Chimney Swift | 13 | 65 | 46 | 52 | 241 | | 1 | 5 | 1446 |
| Ruby-throated Hummingbird | 2 | 3 | 9 | 12 | 12 | 3 | 4 | 2 | 162 |
| Clapper Rail | | | | 10 | | 2 | 3 | 1 | 16 |
| King Rail | | | | | | | | 1 | 3 |
| Virginia Rail | | 2 | 3 | 34 | | 5 | | | 48 |
| Sora | | | | | | | | | 2 |
| Common Gallinule | | | | 2 | | | | | 3 |
| Sandhill Crane | | | | | | | | | 1 |
| Black-necked Stilt | | | | 2 | | 15 | | | 17 |
| American Oystercatcher | | | | 4 | | | | 4 | 8 |
| Black-bellied Plover | | 654 | 16 | 6 | 15 | 9 | 5 | 806 | 1543 |
| American Golden-Plover | | 1 | | | | | | | 1 |

| Species | CE | KE | TA | DO | CN | SO | WI | WO | Total |
|----------------------------|----|-----|-----|------|------|-----|-----|------|-------|
| Semipalmated Plover | 12 | 87 | 1 | 50 | 34 | 15 | 10 | 18 | 243 |
| Killdeer | 2 | 5 | 13 | 37 | 25 | 1 | 2 | 3 | 206 |
| Ruddy Turnstone | | | | 15 | | | | 53 | 69 |
| Sanderling | | | | 6 | | | | 2 | 8 |
| Dunlin | | 6 | 7 | 195 | | | | 209 | 420 |
| Least Sandpiper | 37 | 60 | 43 | 299 | 14 | | 70 | 18 | 585 |
| White-rumped Sandpiper | | | | 1 | | | | | 4 |
| Pectoral Sandpiper | 1 | | | | | | | | 2 |
| Semipalmated Sandpiper | 1 | | | 78 | 12 | | 3 | 86 | 227 |
| sandpiper sp. | | | | 5 | | | | | 5 |
| Short-billed Dowitcher | | 2 | | 17 | | 11 | | 10 | 79 |
| Long-billed Dowitcher | | | | | | | | | 1 |
| American Woodcock | | | | | 2 | | | | 11 |
| Wilson's Snipe | | | | | 8 | 2 | | | 10 |
| Spotted Sandpiper | | | 4 | 58 | 10 | | 4 | 1 | 187 |
| Solitary Sandpiper | 1 | | 7 | 12 | 3 | 1 | | 1 | 151 |
| Lesser Yellowlegs | 21 | 19 | 4 | 35 | 17 | | | 8 | 116 |
| Willet | | | 1 | 50 | | 34 | | | 88 |
| Greater Yellowlegs | 17 | 2 | 3 | 51 | 16 | 2 | 12 | 25 | 146 |
| yellowlegs sp. | | 1 | | | | | | | 1 |
| Bonaparte's Gull | | | | | 2 | | | 1 | 11 |
| Laughing Gull | 90 | 2 | 331 | 1018 | 1357 | 353 | 111 | 415 | 3977 |
| Ring-billed Gull | 5 | 288 | 23 | 45 | 113 | | | 4 | 12 |
| Herring Gull | | | 20 | 85 | 2 | 25 | 9 | 192 | 384 |
| Lesser Black-backed Gull | | | | | | | | 1 | 1 |
| Great Black-backed Gull | | 1 | 11 | 21 | 2 | 2 | 2 | 29 | 114 |
| gull sp. | | | | | 4 | | | | 9 |
| Least Tern | | 7 | 14 | 8 | 4 | 3 | | 17 | 58 |
| Caspian Tern | | 4 | | 2 | | 7 | | | 25 |
| Black Tern | | | | | | 2 | | | 2 |
| Common Tern | | | | 11 | 2 | 5 | | 30 | 55 |
| Forster's Tern | 23 | 12 | 89 | 10 | 32 | 6 | 32 | 224 | |
| Royal Tern | | | 1 | 39 | | | 4 | 60 | 117 |
| Black Skimmer | | | | | | | 25 | 25 | |
| Common Loon | | | 4 | 1 | | | | | 18 |
| Double-crested Cormorant | 26 | 688 | 160 | 22 | 24 | 69 | 130 | 1806 | |
| American White Pelican | | | | 1 | | | | | 1 |
| Brown Pelican | | | 5 | 143 | | 6 | | | 287 |
| American Bittern | | | | | | 1 | | | 2 |
| Least Bittern | | | | 1 | | | | | 2 |
| Great Blue Heron | 14 | 18 | 93 | 92 | 26 | 12 | 31 | 4 | 542 |
| Great Egret | 3 | 1 | 9 | 72 | 1 | 34 | 3 | 7 | 147 |
| Snowy Egret | | | 11 | 38 | | 21 | 2 | 29 | 120 |
| Little Blue Heron | | | | 2 | | | | 1 | 9 |
| Tricolored Heron | | | | 1 | | | | | 1 |
| Cattle Egret | 11 | | 13 | | | | | | 25 |
| Green Heron | 2 | | 11 | 16 | 5 | 1 | 2 | 1 | 133 |
| Black-crowned Night-Heron | | | | | | | | 4 | 25 |
| Yellow-crowned Night-Heron | | | | | | | | | 15 |
| Glossy Ibis | | | 2 | 4 | 2 | 2 | | 100 | 111 |
| Black Vulture | 3 | 35 | 33 | 37 | 86 | 2 | 11 | 6 | 907 |
| Turkey Vulture | 17 | 93 | 199 | 232 | 213 | 35 | 76 | 109 | 1965 |
| Osprey | 5 | 48 | 140 | 110 | 45 | 9 | 25 | 1 | 922 |

| Species | CE | KE | TA | DO | CN | SO | WI | WO | Total |
|-------------------------------|----|-----|-----|-----|-----|----|----|----|-------|
| Bald Eagle | 3 | 21 | 35 | 109 | 20 | 11 | 14 | 6 | 401 |
| Northern Harrier | | | | 2 | | 3 | | | 9 |
| Sharp-shinned Hawk | | | | 3 | 1 | | | | 6 |
| Cooper's Hawk | | 1 | 2 | 4 | 3 | 1 | | | 31 |
| Red-shouldered Hawk | 4 | | 1 | 1 | 5 | | 2 | | 148 |
| Broad-winged Hawk | 1 | | | | | | | | 13 |
| Red-tailed Hawk | 5 | | 9 | 10 | 5 | 3 | | 2 | 174 |
| hawk sp. | | | | | | | | | 1 |
| Barn Owl | | | | | | | | | 12 |
| Eastern Screech-Owl | | | 4 | 3 | 2 | 1 | | | 17 |
| Great Horned Owl | | | 1 | | 8 | | | | 12 |
| Barred Owl | | 3 | | | 8 | | | | 61 |
| Belted Kingfisher | 3 | | 1 | 5 | 3 | | | | 94 |
| Red-headed Woodpecker | | | 2 | 14 | | | | | 49 |
| Red-bellied Woodpecker | 15 | 7 | 45 | 24 | 43 | 3 | 6 | 2 | 969 |
| Yellow-bellied Sapsucker | | | | | | | | | 10 |
| Downy Woodpecker | 5 | 5 | 15 | 14 | 16 | 3 | 7 | 3 | 473 |
| Hairy Woodpecker | | | 2 | 2 | 7 | | | 2 | 115 |
| Downy/Hairy Woodpecker | | | | | | | | | 1 |
| Northern Flicker | | 1 | 4 | 17 | 12 | 4 | | 1 | 236 |
| Pileated Woodpecker | 1 | 3 | 9 | 12 | 16 | 1 | 1 | 2 | 249 |
| American Kestrel | | | | 2 | 2 | | | | 32 |
| Merlin | | | | 1 | 1 | | | | 5 |
| Peregrine Falcon | | | | | | | | | 4 |
| Olive-sided Flycatcher | | | | | | | | | 1 |
| Eastern Wood-Pewee | 6 | 2 | 15 | 8 | 12 | | 2 | 6 | 157 |
| Acadian Flycatcher | 6 | | 1 | 4 | 5 | 2 | 3 | 7 | 170 |
| Alder Flycatcher | | | | | | | | | 4 |
| Willow Flycatcher | | | | | | | | | 10 |
| Least Flycatcher | | | | | | | | | 26 |
| <i>Empidonax</i> sp. | | | | | | | | | 1 |
| Eastern Phoebe | 4 | | 5 | 3 | 25 | | 1 | 2 | 362 |
| Great Crested Flycatcher | 12 | 18 | 63 | 103 | 78 | 20 | 26 | 14 | 735 |
| Eastern Kingbird | 11 | 22 | 25 | 47 | 26 | 5 | 8 | 3 | 582 |
| White-eyed Vireo | 9 | | 10 | 15 | 12 | 9 | 14 | 13 | 292 |
| Yellow-throated Vireo | 3 | | 2 | 3 | | 2 | | 3 | 105 |
| Blue-headed Vireo | | | 4 | | 1 | | | | 53 |
| Philadelphia Vireo | | | | | | | | | 1 |
| Warbling Vireo | 2 | 2 | 1 | | | | | | 131 |
| Red-eyed Vireo | 35 | 24 | 39 | 26 | 38 | 4 | 11 | 10 | 1305 |
| Blue Jay | 16 | 15 | 34 | 54 | 91 | 3 | 17 | 2 | 1514 |
| American Crow | 30 | 21 | 112 | 189 | 87 | 26 | 36 | 43 | 2538 |
| Fish Crow | 11 | 10 | 20 | 10 | 21 | 1 | 9 | 4 | 376 |
| crow sp. | | | | 81 | 17 | | 7 | | 388 |
| Common Raven | | | | | | | | | 49 |
| Horned Lark | 2 | 16 | 11 | 9 | 49 | | 2 | 34 | 194 |
| Purple Martin | 2 | 59 | 129 | 137 | 129 | | 22 | 52 | 960 |
| Tree Swallow | 45 | 50 | 258 | 682 | 223 | 29 | 4 | 72 | 3144 |
| Northern Rough-winged Swallow | 14 | 1 | 5 | 8 | 11 | | 5 | 1 | 594 |
| Bank Swallow | 12 | 7 | 2 | 12 | 2 | | | 2 | 109 |
| Cliff Swallow | | 6 | 3 | | 5 | | | | 130 |
| Barn Swallow | 28 | 113 | 195 | 467 | 172 | 40 | 47 | 99 | 3991 |
| Carolina Chickadee | 18 | 21 | 41 | 52 | 75 | 7 | 24 | 10 | 1266 |

| Species | CE | KE | TA | DO | CN | SO | WI | WO | Total |
|-------------------------|----|-----|-----|-----|-----|-----|-----|----|-------|
| Black-capped Chickadee | | | | | | | | | 142 |
| Tufted Titmouse | 24 | 24 | 56 | 54 | 69 | 5 | 21 | 17 | 1394 |
| Red-breasted Nuthatch | | | | | | | | | 6 |
| White-breasted Nuthatch | 3 | 2 | 9 | 2 | 12 | | 2 | | 336 |
| Brown-headed Nuthatch | | 1 | 3 | 83 | | 11 | | | 109 |
| Brown Creeper | | | | | | | | | 14 |
| House Wren | 4 | | 8 | 21 | 8 | 18 | 8 | 1 | 499 |
| Winter Wren | | | | | | | | | 3 |
| Marsh Wren | | | 2 | 38 | 1 | 47 | 1 | | 104 |
| Carolina Wren | 11 | 38 | 57 | 84 | 61 | 7 | 35 | 17 | 1514 |
| Blue-gray Gnatcatcher | 16 | 10 | 2 | 35 | 8 | 2 | 2 | 28 | 895 |
| Golden-crowned Kinglet | | | | | | | | | 5 |
| Ruby-crowned Kinglet | | | | | | | | | 7 |
| Eastern Bluebird | 4 | 15 | 79 | 103 | 73 | 8 | 3 | 10 | 1309 |
| Veery | 8 | | | | | | | | 82 |
| Gray-cheeked Thrush | 1 | | | | | | | | 5 |
| Swainson's Thrush | 2 | | 1 | | | | | | 69 |
| Hermit Thrush | | | | | 4 | | 1 | | 17 |
| Wood Thrush | 32 | 11 | 47 | 5 | 17 | 1 | 2 | 8 | 842 |
| American Robin | 21 | 146 | 186 | 276 | 288 | 28 | 85 | 20 | 4622 |
| Gray Catbird | 26 | 6 | 32 | 36 | 50 | 3 | 9 | 1 | 1940 |
| Brown Thrasher | 4 | 16 | 29 | 16 | 25 | | 6 | 2 | 439 |
| Northern Mockingbird | 7 | 33 | 66 | 90 | 82 | 7 | 15 | 12 | 1087 |
| European Starling | 15 | 114 | 154 | 425 | 853 | 37 | 221 | 93 | 6713 |
| Cedar Waxwing | 25 | 33 | 1 | 8 | 82 | | | 3 | 987 |
| House Sparrow | 6 | 82 | 29 | 57 | 121 | 2 | 5 | 20 | 1725 |
| House Finch | 2 | 23 | 20 | 12 | 54 | 9 | 11 | | 1010 |
| Purple Finch | | | | | | | | | 33 |
| Pine Siskin | | | | | | | | | 1 |
| American Goldfinch | 6 | 39 | 42 | 71 | 81 | 5 | 9 | 9 | 2201 |
| Eastern Towhee | 9 | 8 | 6 | 26 | 11 | 5 | 1 | | 679 |
| Chipping Sparrow | 18 | 51 | 123 | 108 | 100 | 13 | 32 | 41 | 1980 |
| Field Sparrow | 3 | | 12 | 10 | 23 | | 4 | 5 | 369 |
| Vesper Sparrow | | | | | 4 | | | | 6 |
| Savannah Sparrow | 3 | | 5 | 1 | | 2 | | | 107 |
| Grasshopper Sparrow | 1 | 2 | 4 | 11 | 7 | | 1 | 4 | 161 |
| Henslow's Sparrow | | | | | | | | | 1 |
| Saltmarsh Sparrow | | | | 3 | | 12 | | | 15 |
| Seaside Sparrow | | | | 76 | | 91 | 1 | 5 | 174 |
| Song Sparrow | 6 | 1 | 3 | 4 | 8 | 6 | 2 | | 851 |
| Lincoln's Sparrow | | | | | | | | | 7 |
| Swamp Sparrow | 1 | 1 | 2 | 3 | | | | | 79 |
| White-throated Sparrow | 4 | 12 | 4 | 3 | 3 | 1 | | | 237 |
| White-crowned Sparrow | | 1 | | | | | | | 33 |
| Dark-eyed Junco | | | | | | | | | 6 |
| Yellow-breasted Chat | 3 | | 13 | 6 | 6 | 3 | | 3 | 115 |
| Bobolink | 40 | | | 17 | | | | | 370 |
| Eastern Meadowlark | 1 | 1 | | 25 | 5 | 8 | 1 | 3 | 215 |
| Orchard Oriole | 9 | 15 | 10 | 29 | 11 | 4 | 6 | 6 | 329 |
| Baltimore Oriole | 14 | 5 | 14 | 3 | 4 | | | | 538 |
| Red-winged Blackbird | 35 | 179 | 385 | 928 | 305 | 207 | 65 | 51 | 5692 |
| Brown-headed Cowbird | 23 | 24 | 40 | 204 | 64 | 2 | 34 | 22 | 1277 |
| Rusty Blackbird | | | | | | | | | 11 |

| Species | CE | KE | TA | DO | CN | SO | WI | WO | Total |
|------------------------------|----|-----|-----|-----|-----|----|-----|-----|-------|
| Common Grackle | 3 | 218 | 477 | 955 | 520 | 81 | 186 | 189 | 5472 |
| Boat-tailed Grackle | | | | 27 | | 11 | | 2 | 40 |
| blackbird sp. | | | | | | | | | 11 |
| Ovenbird | 40 | | 24 | 40 | 13 | 7 | 9 | 27 | 857 |
| Worm-eating Warbler | 7 | | 5 | 6 | 2 | | | 8 | 83 |
| Louisiana Waterthrush | 3 | | 1 | 2 | 1 | 1 | | 4 | 122 |
| Northern Waterthrush | 2 | | 2 | 2 | 1 | | | | 99 |
| waterthrush sp. | | | | | | | | | 3 |
| Golden-winged Warbler | | | | | | | | | 2 |
| Lawrence's Warbler | | | | | | | | | 1 |
| Blue-winged Warbler | | | 2 | | | | | | 27 |
| Black-and-white Warbler | 12 | 3 | 6 | 4 | 6 | | 1 | | 273 |
| Prothonotary Warbler | | | | 1 | 7 | 11 | 1 | 2 | 70 |
| Tennessee Warbler | | | | | | | | | 13 |
| Nashville Warbler | 1 | | | 1 | | | | | 12 |
| Mourning Warbler | | | | | | | | | 3 |
| Kentucky Warbler | 1 | | 3 | 2 | 3 | | | 3 | 40 |
| Common Yellowthroat | 18 | 17 | 76 | 125 | 29 | 28 | 12 | 7 | 1405 |
| Hooded Warbler | 8 | | | 1 | | | | | 110 |
| American Redstart | 17 | 7 | 11 | 11 | 1 | | | | 423 |
| Cape May Warbler | | | 1 | | | | | | 26 |
| Cerulean Warbler | | | | | | | | | 23 |
| Northern Parula | 6 | 6 | 3 | 8 | 15 | | 2 | 5 | 484 |
| Magnolia Warbler | 12 | | 8 | 1 | 1 | | | | 129 |
| Bay-breasted Warbler | | | | | | | | | 17 |
| Blackburnian Warbler | | | 1 | | | | | | 59 |
| Yellow Warbler | 6 | 2 | 10 | 10 | 3 | 1 | | 5 | 428 |
| Chestnut-sided Warbler | 8 | | 2 | 1 | 1 | | | | 149 |
| Blackpoll Warbler | 4 | | 5 | 2 | 10 | | | | 144 |
| Black-throated Blue Warbler | 7 | 4 | 4 | 5 | | | | | 231 |
| Palm Warbler | | | | | 3 | | | | 13 |
| Pine Warbler | 7 | 3 | 21 | 81 | 11 | 10 | 14 | 11 | 230 |
| Yellow-rumped Warbler | 9 | 2 | 11 | 10 | 22 | | | | 521 |
| Yellow-throated Warbler | | | 1 | | | | 1 | 8 | 37 |
| Prairie Warbler | 1 | | 1 | 10 | 4 | 1 | 3 | 4 | 92 |
| Black-throated Green Warbler | 4 | | 2 | 5 | | | | | 183 |
| Canada Warbler | 2 | | | 1 | | | | | 28 |
| Wilson's Warbler | | | 1 | | | | | | 25 |
| warbler sp. | | | | | | | | | 1 |
| Summer Tanager | | | 4 | 23 | 2 | 1 | 8 | 15 | 104 |
| Scarlet Tanager | 21 | 6 | 11 | 4 | 7 | | | 2 | 680 |
| Northern Cardinal | 28 | 151 | 116 | 136 | 154 | 16 | 42 | 35 | 3863 |
| Rose-breasted Grosbeak | 2 | | | 1 | 1 | | | | 176 |
| Blue Grosbeak | 2 | 12 | 31 | 48 | 34 | 1 | 5 | 10 | 266 |
| Indigo Bunting | 12 | 11 | 32 | 95 | 48 | 2 | 17 | 20 | 1195 |
| Dickcissel | | | | 1 | | | | | 9 |

2017 Maryland Fall Count

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The annual Maryland Fall Count is held on the third weekend in September with the choice of Saturday or Sunday at the discretion of the county and/or compiler. In 2017, data from 12 of Maryland's 23 counties were compiled. Five counties counted on Saturday, 16 September; six on Sunday, 17 September (Table 1). Receiving results from eleven counties is a decrease in participation for Fall Count. For several counties this seasonal count has been a long-held tradition, with this year being the 27th count for Allegany, 24th for Howard, and 22nd for Dorchester. For the first time in over 16 years, Baltimore did not participate in the count. As an experiment, the author collected all eBird accounts from Baltimore on 16 September and compiled the results. The results are included in the results below, but did not exhibit the diversity of coverage and supporting data that an organized count would have.

Table 1: 2017 Maryland Fall Count: participating counties, county codes, survey dates, and compilers.

| County | Code | Survey Date | Compiler |
|-----------------|------|-------------------|-------------------------------|
| Allegany | AL | 17 September 2017 | Chuck Hager |
| Washington | WA | 16 September 2017 | Doris Berger |
| Carroll | CA | 16 September 2017 | Don Jewell |
| Howard | HO | 16 September 2017 | Mike McClure, Chuck Stirrat |
| Baltimore | BA | 16 September 2017 | Chuck Stirrat (eBird reports) |
| Prince George's | PG | 17 September 2017 | Dave Mozurkewich |
| Calvert | CT | 17 September 2017 | Sherman Suter |
| Kent | KE | 17 September 2017 | Walter Ellison, Nancy Martin |
| Caroline | CN | 16 September 2017 | Debby Bennett |
| Talbot | TA | 17 September 2017 | David Palmer |
| Dorchester | DO | 16 September 2017 | Harry Armistead |
| Somerset | SO | 17 September 2017 | Paul Bystrak |

The weather varied over the extent of the state and from Saturday to Sunday, but less than observed in prior counts. Morning temperatures were in the low to mid 60s °F, rising to highs in the low to mid 80s °F. All reported calm to light winds, generally increasing as the day proceeded. Cloud coverage was highly variable with partly cloudy conditions predominating. There were no reports of significant precipitation for either day, except for Dorchester which had a brief but heavy shower late on Saturday afternoon followed by a rainbow.

A total of 277 field observers in 136 parties turned up 199 species and 64,250 individual birds. They spent a total of 480.7 hours and covered 310.3 miles on foot and spent 42.6 hours stationary. Birders spent 186.5 hours and 1698.9 miles birding by car. Observers covered 22.0 miles in 12.8 hours by other modes of transport, including by boat. Participants in seven counties reported spending 23.6 hours traveling 119.9 miles while owling. Feeder watchers spent 24.3 hours (Table 2).

Tundra Swan, a write-in species was found in two counties, Kent (1) and Dorchester (2). Species with only a single individual found statewide included Gadwall (Prince George's), Ring-necked Duck (Dorchester), Common Merganser (Baltimore), Hudsonian Godwit (Dorchester), White-rumped Sandpiper (Talbot), Western Sandpiper (Dorchester), Willet (Talbot), Red-necked Phalarope (Dorchester), Bonaparte's Gull (Caroline), Common Loon (Dorchester), Peregrine Falcon (Calvert), Olive-sided Flycatcher (Dorchester), Swamp Sparrow (Dorchester), Prothonotary Warbler (Howard), Connecticut Warbler (Kent), and Kentucky Warbler (Prince George's)(Table 3).

The following highlights were noted by compilers and the author. Marcia Balestri's visit to Hurlock Wastewater Treatment Plant (Dorchester) found 28 American Golden-Plovers (Figure 1) and a Hudsonian Godwit (Figure 2). The YMOS (Youth Division of the Maryland Ornithological Society) group located a Red-necked Phalarope on Taylor's Island (Dorchester). Statewide there were 393 Brown Pelicans with the 387 in Dorchester being a new high. Forster's Terns were abundant this count with a total of 1518 (high for prior 4 years was 1039). The Dickcissels, one each in Calvert and Dorchester, were the first reported in the last five counts. A lone female Common Merganser was continuing at Loch Raven Reservoir.

There were 37 species that were observed in only one county. Twenty of these were observed in Dorchester County, with the rest being 4 each in Prince George's and Caroline, 2 each in Calvert, Kent, and Talbot, and 1 each in Allegany, Howard, and Baltimore County. Fourteen species were reported for all 12 counts which is lower than normal largely due to some counties having very limited coverage.

Thank you to all participants and especially the compilers. I urge more participants to enjoy the experience and join in one of the 2018 counts that will be held on 15 or 16 September. I hope additional counties will have volunteers who choose to organize a count in the future and reverse the trend of decreasing interest and participation in organized seasonal counts.

Table 2. 2017 Maryland Fall Count: summary.

| | AL | WA | CA | HO | BA | PG | CT | KE | CN | TA | DO | SO | Total |
|------------|-------|------|-------|--------|------|-------|------|-------|------|-------|--------|-----|--------|
| Total | | | | | | | | | | | | | |
| Species | 79 | 58 | 95 | 123 | 104 | 116 | 126 | 125 | 105 | 103 | 165 | 32 | 199 |
| Total | | | | | | | | | | | | | |
| Birds | 1903 | 1514 | 3895 | 11,776 | 3066 | 9475 | 6154 | 4788 | 4853 | 4459 | 12,172 | 195 | 64,250 |
| Start | | | | | | | | | | | | | |
| Time | 0648 | | | 0525 | 0230 | 0630 | 0622 | 0640 | 0530 | 0600 | 0230 | | 0230 |
| Stop | | | | | | | | | | | | | |
| Time | 1600 | | | 2300 | 2300 | 1950 | 1947 | 1940 | 2100 | 1900 | 1915 | | 2300 |
| Parties | 6 | | 9 | 46 | 17 | 15 | 12 | 4 | 9 | 7 | 10 | 1 | 136 |
| Individual | | | | | | | | | | | | | |
| People | 6 | | 19 | 65 | 82 | 20 | 17 | 7 | 18 | 22 | 19 | 2 | 277 |
| Hours | | | | | | | | | | | | | |
| Driving | 18.3 | 13.0 | 18.0 | 35.4 | | 14.8 | 6.5 | 12.0 | 20.0 | 14.0 | 32.0 | 2.5 | 186.5 |
| Miles | | | | | | | | | | | | | |
| Driving | 154.4 | 98.0 | 239.0 | 397.6 | | 104.0 | 17.6 | 125.0 | 31.5 | 126.8 | 397.0 | 8.0 | 1698.9 |
| Hours | | | | | | | | | | | | | |
| Walking | 12.5 | | 39.5 | 168.2 | 22.4 | 68.3 | 34.5 | 18.0 | 32.5 | 27.8 | 56.0 | 1.0 | 480.7 |
| Miles | | | | | | | | | | | | | |
| Walking | 8.0 | | 27.5 | 126.8 | 11.0 | 39.8 | 24.6 | 14.0 | 12.0 | 17.6 | 28.0 | 1.0 | 310.3 |
| Hours | | | | | | | | | | | | | |
| Boating | | | | | 5.8 | | | | | | | | 5.8 |
| Miles | | | | | | | | | | | | | |
| Boating | | | | | 5.0 | | | | | | | | 5.0 |
| Stationary | | | | | | | | | | | | | |
| Hours | 3.0 | 2.5 | 0.5 | 17.7 | 6.5 | | 12.4 | | | | | | 42.6 |
| Feeder | | | | | | | | | | | | | |
| Hours | | | 1.5 | 5.8 | | 6.0 | | | 11.0 | | | | 24.3 |
| Hours | | | | | | | | | | | | | |
| Owling | | | 0.5 | 1.1 | | 1.3 | 0.9 | | 2.8 | 2.0 | 15.0 | | 23.6 |
| Miles | | | | | | | | | | | | | |
| Owling | | | 1.0 | 0.9 | | 0.7 | 0.3 | | 14.0 | 20.0 | 83.0 | | 119.9 |
| Hours | | | | | | | | | | | | | |
| Other | | | 1.3 | | | 1.0 | | | 3.0 | 1.7 | | | 7.0 |
| Miles | | | | | | | | | | | | | |
| Other | | | 0.0 | | | 3.0 | | | 2.0 | 12.0 | | | 17.0 |



Figure 1. Multiple American Golden-Plovers (*Pluvialis dominica*) and one Killdeer (*Charadrius vociferus*). Hurlock Wastewater Treatment Plant, Dorchester County, Maryland; 16 September 2017; photographed by Marcia Balestri.



Figure 2. Hudsonian Godwit (*Limosa haemastica*). Hurlock Wastewater Treatment Plant, Dorchester County, Maryland; 16 September 2017; photographed by Marcia Balestri.

Table 3. 2017 Maryland Fall Count: observed species.

| Species | AL | WA | CA | HO | BA | PG | CT | KE | CN | TA | DO | SO | Total |
|---------------------------|-----|-----|-----|------|-----|-----|-----|----|-----|-----|-----|----|-------|
| Canada Goose | 108 | 120 | 331 | 1123 | 13 | 520 | 181 | 85 | 241 | 74 | 418 | 23 | 3237 |
| Tundra Swan | | | | | | | | 1 | | | 2 | | 3 |
| Wood Duck | 25 | 1 | 4 | 20 | 8 | 95 | 4 | 12 | 17 | 15 | 109 | | 310 |
| Blue-winged Teal | | | | | | | | 6 | | 2 | 12 | | 20 |
| Northern Shoveler | | | | | | | | 14 | | 5 | 43 | | 62 |
| Gadwall | | | | | | | 1 | | | | | | 1 |
| Mallard | 30 | 3 | 72 | 115 | 28 | 138 | 169 | 60 | 50 | 46 | 597 | | 1308 |
| American Black Duck | | | | | | 10 | 3 | 2 | | | 25 | | 40 |
| Northern Pintail | | | | | | | | 2 | 2 | | 3 | | 7 |
| Green-winged Teal | 4 | | | | | 124 | 2 | 3 | | 60 | 38 | | 231 |
| Ring-necked Duck | | | | | | | | | | | 1 | | 1 |
| Black Scoter | | | | | | | 4 | | | 1 | | | 5 |
| Common Merganser | | | | | 1 | | | | | | | | 1 |
| Ruddy Duck | | | | | | | | 1 | | 1 | 19 | | 21 |
| Northern Bobwhite | | | | | | | | | | | 3 | | 3 |
| Wild Turkey | 28 | 1 | | 4 | | 5 | | 37 | 29 | | 3 | | 107 |
| Pied-billed Grebe | | | 1 | 1 | | 2 | 2 | | | | 6 | | 12 |
| Rock Pigeon | 105 | 40 | 60 | 110 | 66 | 393 | 8 | 10 | 109 | 70 | 39 | | 1010 |
| Mourning Dove | 72 | 86 | 94 | 464 | 32 | 561 | 83 | 42 | 160 | 67 | 145 | 12 | 1818 |
| Yellow-billed Cuckoo | | 1 | 5 | 6 | 3 | 9 | 8 | 3 | 2 | 1 | 8 | | 46 |
| Common Nighthawk | | | 2 | 11 | 2 | | | | | | 5 | | 20 |
| Chimney Swift | 76 | 26 | 24 | 116 | 541 | 191 | 1 | 4 | 465 | 340 | 4 | | 1788 |
| Ruby-throated Hummingbird | 8 | 7 | 21 | 52 | 12 | 14 | 17 | 13 | 31 | 7 | 21 | 1 | 204 |
| Clapper Rail | | | | | | | | | | | 2 | | 2 |
| King Rail | | | | | | | | | | | 2 | | 2 |
| Virginia Rail | | | | | | | 1 | 1 | | 1 | 23 | | 26 |
| Sora | | | | | | 2 | | | | | | | 2 |
| Common Gallinule | | | | | | | | | | | 2 | | 2 |
| American Oystercatcher | | | | | | | | | | | 2 | | 2 |
| Black-bellied Plover | | | | | | | | | | | 9 | | 9 |
| American Golden-Plover | | | | | | | | | | | 28 | | 28 |
| Semipalmated Plover | | | | | | | | | | | 32 | | 32 |
| Killdeer | 29 | | 5 | 50 | 12 | 28 | 6 | 13 | 26 | 2 | 29 | | 200 |
| Hudsonian Godwit | | | | | | | | | | | 1 | | 1 |
| Sanderling | | | | | | | | | | | 4 | | 4 |
| Least Sandpiper | | | | 2 | 5 | | 4 | 1 | | | 40 | | 52 |
| White-rumped Sandpiper | | | | | | | | | | 1 | | | 1 |
| Pectoral Sandpiper | 2 | | | | 5 | | | | | | 19 | | 26 |
| Semipalmated Sandpiper | 1 | | | | | | | 3 | | | 34 | | 38 |
| Western Sandpiper | | | | | | | | | | | 1 | | 1 |
| American Woodcock | | | | | | | 1 | | 1 | | | | 2 |

| Species | AL | WA | CA | HO | BA | PG | CT | KE | CN | TA | DO | SO | Total |
|-------------------------------|----|----|-----|-----|----|-----|-----|-----|-----|------|-----|-----|-------|
| Wilson's Snipe | | | | | | | | | 9 | | | | 9 |
| Spotted Sandpiper | | | | 3 | | | | | 7 | 2 | 1 | | 13 |
| Solitary Sandpiper | 1 | | | 7 | 2 | | | | | | | 1 | 11 |
| Lesser Yellowlegs | 3 | | 3 | | 4 | | 1 | 13 | | | 30 | 1 | 55 |
| Willet | | | | | | | | | | 1 | | | 1 |
| Greater Yellowlegs | 2 | | 1 | | | 1 | | 1 | | | 31 | 7 | 43 |
| Red-necked Phalarope | | | | | | | | | | | 1 | | 1 |
| Bonaparte's Gull | | | | | | | | | 1 | | | | 1 |
| Laughing Gull | | | | | 10 | 922 | 975 | 625 | 16 | 265 | 884 | 53 | 3750 |
| Ring-billed Gull | | | | 4 | 46 | 111 | 170 | 92 | 110 | 20 | 80 | | 633 |
| Herring Gull | | | | | 2 | | 250 | 13 | 2 | 72 | 478 | | 817 |
| Great Black-backed Gull | | | | | 1 | | 593 | 9 | 1 | 8 | 117 | 1 | 730 |
| unidentified gull | | | | 3 | | | 50 | | | 48 | | 7 | 108 |
| Caspian Tern | | | | 2 | 1 | 12 | 3 | 7 | | | 13 | | 38 |
| Common Tern | | | | | | | 25 | | 2 | 5 | 45 | 1 | 78 |
| Forster's Tern | | | | | | | 5 | 600 | 133 | 6 | 130 | 644 | 1518 |
| Royal Tern | | | | | | | 64 | 8 | | 39 | 102 | 4 | 217 |
| unidentified tern | | | | | | | 25 | | | | 2 | | 27 |
| Common Loon | | | | | | | | | | | 1 | | 1 |
| Double-crested Cormorant | | | 1 | 15 | 35 | 88 | 480 | 95 | 49 | 1500 | 617 | 17 | 2897 |
| American White Pelican | | | | | | | | | | | 3 | | 3 |
| Brown Pelican | | | | | | | 4 | | | 2 | 387 | | 393 |
| Great Blue Heron | 3 | | 13 | 35 | 12 | 24 | 16 | 39 | 12 | 24 | 82 | 1 | 261 |
| Great Egret | | | 1 | 4 | 3 | 10 | 3 | 6 | 1 | 8 | 162 | | 198 |
| Snowy Egret | | | | | | | 29 | 1 | 2 | 16 | 78 | 11 | 137 |
| Little Blue Heron | | | | | | | | | | | 2 | | 2 |
| Tricolored Heron | | | | | | | | | | | 12 | 1 | 13 |
| Cattle Egret | | | | | | | | 1 | | 50 | 44 | | 95 |
| Green Heron | 1 | | 5 | 20 | 2 | 3 | 9 | 1 | | 4 | 2 | | 47 |
| Black-crowned Night-Heron | | | | 1 | 1 | 1 | | 2 | | | | | 5 |
| Glossy Ibis | | | | | | | | | | | 2 | | 2 |
| Black Vulture | 6 | | 18 | 115 | 37 | 115 | 74 | 31 | 51 | 34 | 33 | | 514 |
| Turkey Vulture | 33 | 30 | 103 | 180 | 32 | 131 | 144 | 225 | 244 | 98 | 304 | 5 | 1529 |
| Osprey | 2 | | | 2 | 21 | 2 | 16 | 9 | 6 | 11 | 24 | | 93 |
| Bald Eagle | 1 | | 2 | 2 | 10 | 16 | 58 | 40 | 15 | 21 | 104 | 3 | 272 |
| Northern Harrier | 1 | | 1 | 1 | | | | | | | 6 | | 9 |
| Sharp-shinned Hawk | | | 1 | 1 | 20 | | 1 | 9 | 1 | 7 | 7 | | 47 |
| Cooper's Hawk | 2 | 1 | 4 | 8 | 3 | 7 | 2 | 3 | 2 | 1 | 8 | | 41 |
| unidentified <i>Accipiter</i> | | | | 2 | 1 | 1 | | | | | | | 4 |
| Red-shouldered Hawk | 1 | 3 | 13 | 79 | 8 | 24 | 9 | 2 | 7 | | 3 | | 149 |
| Broad-winged Hawk | 1 | 75 | 12 | 24 | 50 | 3 | | | | 8 | | | 173 |
| Red-tailed Hawk | 4 | 5 | 10 | 16 | 5 | 11 | 3 | 5 | 7 | | 5 | | 71 |
| Eastern Screech-Owl | 4 | | 5 | 3 | | 1 | 6 | 5 | 7 | 3 | 45 | | 79 |

| Species | AL | WA | CA | HO | BA | PG | CT | KE | CN | TA | DO | SO | Total |
|-------------------------------|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-------|
| Great Horned Owl | | | 2 | 6 | 1 | 2 | 2 | | 3 | 5 | 9 | | 30 |
| Barred Owl | | 3 | 2 | 7 | 1 | 3 | 4 | 2 | 8 | | 10 | | 40 |
| Belted Kingfisher | 2 | 5 | 8 | 27 | 5 | 12 | 9 | 3 | 4 | 7 | 10 | 1 | 93 |
| Red-headed Woodpecker | | | 9 | 4 | 1 | 5 | 9 | 1 | | 3 | 25 | | 57 |
| Red-bellied Woodpecker | 26 | 19 | 87 | 233 | 21 | 89 | 53 | 41 | 47 | 20 | 30 | 1 | 667 |
| Downy Woodpecker | 10 | 8 | 36 | 119 | 15 | 55 | 50 | 24 | 26 | 17 | 65 | 2 | 427 |
| Hairy Woodpecker | 4 | 1 | 1 | 34 | 9 | 15 | 8 | 10 | 6 | 3 | 11 | | 102 |
| Northern Flicker | 18 | 6 | 23 | 91 | 15 | 52 | 21 | 23 | 11 | 21 | 31 | 1 | 313 |
| Pileated Woodpecker | 11 | 5 | 14 | 53 | 9 | 17 | 19 | 11 | 21 | 13 | 20 | | 193 |
| American Kestrel | 4 | 5 | 1 | 8 | 14 | 19 | 6 | 6 | 5 | 4 | 27 | | 99 |
| Merlin | | | | | 4 | | 3 | 1 | | 4 | | | 12 |
| Peregrine Falcon | | | | | | | 1 | | | | | | 1 |
| Olive-sided Flycatcher | | | | | | | | | | | 1 | | 1 |
| Eastern Wood-Pewee | 4 | 3 | 16 | 56 | 14 | 36 | 36 | 47 | 12 | 21 | 53 | | 298 |
| Yellow-bellied Flycatcher | | | | 1 | | | | | 1 | 1 | | | 3 |
| Acadian Flycatcher | | | 3 | | | 9 | 18 | 2 | 2 | | 1 | | 35 |
| Trail's Flycatcher | | | | | | | | 2 | | | | | 2 |
| Least Flycatcher | | | | 3 | | 1 | | | | 2 | 2 | | 8 |
| unidentified <i>Empidonax</i> | | | 5 | 11 | | 5 | | | | | 8 | | 29 |
| Eastern Phoebe | 10 | 3 | 13 | 62 | 7 | 33 | 10 | 8 | 8 | 2 | 7 | | 163 |
| Great Crested Flycatcher | 1 | | 7 | 5 | 1 | 2 | 4 | 5 | 3 | 1 | 13 | | 42 |
| Eastern Kingbird | | | 1 | 2 | | 1 | 2 | 2 | | | 1 | | 9 |
| White-eyed Vireo | | | 8 | 22 | 2 | 17 | 29 | 24 | 6 | 1 | 33 | 6 | 148 |
| Yellow-throated Vireo | 2 | | | 6 | 3 | 4 | 4 | 1 | | | 1 | | 21 |
| Blue-headed Vireo | | 3 | | 2 | | | 1 | | | | | | 6 |
| Philadelphia Vireo | | | | 2 | | 1 | 1 | | | | | | 4 |
| Warbling Vireo | 1 | | 1 | 4 | 5 | | 1 | | | | 1 | | 13 |
| Red-eyed Vireo | 16 | 5 | 21 | 79 | 8 | 14 | 27 | 47 | 13 | 10 | 24 | | 264 |
| Blue Jay | 88 | 39 | 219 | 631 | 114 | 203 | 102 | 114 | 102 | 130 | 192 | | 1934 |
| American Crow | 93 | 54 | 219 | 471 | 21 | 144 | 142 | 28 | 126 | 104 | 173 | 4 | 1579 |
| Fish Crow | 2 | | 6 | 75 | 2 | 42 | 41 | 11 | 139 | 5 | 2 | | 325 |
| unidentified crow | | | | 198 | 7 | 130 | 8 | | | 25 | 19 | | 387 |
| Common Raven | 9 | | | 2 | 1 | | | | | | | | 12 |
| Horned Lark | | | | 2 | | | | 12 | 53 | | 21 | | 88 |
| Purple Martin | | | | 3 | 1 | | | | | | 6 | | 10 |
| Tree Swallow | | | 2 | 48 | 100 | 6 | | 321 | 125 | 4 | 50 | | 656 |
| Bank Swallow | | | | | | | | | | | 2 | | 2 |
| Barn Swallow | | | 1 | 1 | | 2 | 3 | 2 | 4 | 1 | 22 | | 36 |
| Carolina Chickadee | | 15 | 96 | 299 | 39 | 86 | 125 | 87 | 91 | 41 | 145 | 9 | 1033 |
| Black-capped Chickadee | 34 | | | | | | | | | | | | 34 |
| Tufted Titmouse | 42 | 9 | 84 | 248 | 18 | 78 | 128 | 79 | 80 | 44 | 101 | 2 | 913 |
| White-breasted Nuthatch | 32 | 4 | 45 | 163 | 20 | 45 | 37 | 11 | 13 | 7 | 1 | | 378 |
| Brown-headed Nuthatch | | | | | | | 10 | 5 | | 8 | 128 | 7 | 158 |

| Species | AL | WA | CA | HO | BA | PG | CT | KE | CN | TA | DO | SO | Total |
|------------------------|-----|-----|-----|------|-----|------|-----|------|-----|-----|------|----|-------|
| Brown Creeper | 1 | | | | 1 | | | | | | 1 | | 3 |
| House Wren | | | 7 | 37 | 6 | 17 | 9 | 8 | 3 | 8 | 31 | 4 | 130 |
| Winter Wren | | | | | | 1 | | | 1 | | | | 2 |
| Marsh Wren | | | | 1 | | 2 | | 1 | | | 8 | | 12 |
| Carolina Wren | 43 | 30 | 95 | 383 | 29 | 139 | 139 | 97 | 52 | 50 | 129 | 5 | 1191 |
| Blue-gray Gnatcatcher | | 2 | | 22 | 1 | 7 | | 11 | 2 | 11 | 40 | | 96 |
| Ruby-crowned Kinglet | | | | 3 | | 1 | 1 | | | | 1 | | 6 |
| Eastern Bluebird | 10 | 11 | 63 | 346 | 62 | 114 | 61 | 22 | 43 | 45 | 79 | | 856 |
| Veery | | | 1 | 4 | | 2 | 3 | 6 | | 6 | 13 | | 35 |
| Gray-cheeked Thrush | 1 | | | 2 | | 1 | 1 | | | | | | 5 |
| Swainson's Thrush | 2 | | 6 | 10 | 1 | 3 | 7 | 4 | | 2 | 19 | | 54 |
| Hermit Thrush | | | | | | | | | 3 | | | | 3 |
| Wood Thrush | 2 | | 12 | 17 | 1 | 11 | 7 | 6 | 1 | | 1 | | 58 |
| American Robin | 69 | 13 | 67 | 309 | 79 | 148 | 18 | 26 | 109 | 59 | 89 | | 986 |
| Gray Catbird | 26 | 8 | 167 | 389 | 44 | 104 | 22 | 44 | 14 | 9 | 43 | 1 | 871 |
| Brown Thrasher | | | 10 | 17 | 4 | 22 | 14 | 15 | 19 | 6 | 22 | | 129 |
| Northern Mockingbird | 7 | 7 | 54 | 131 | 16 | 103 | 38 | 40 | 47 | 22 | 64 | 1 | 530 |
| European Starling | 213 | 440 | 755 | 1251 | 444 | 725 | 153 | 1008 | 850 | 178 | 1478 | | 7495 |
| Cedar Waxwing | 162 | 89 | 32 | 155 | 84 | 167 | 13 | 63 | 6 | 32 | 17 | | 820 |
| House Sparrow | 110 | 14 | 56 | 467 | 42 | 152 | 35 | 12 | 219 | 25 | 31 | | 1163 |
| House Finch | 25 | 10 | 78 | 207 | 33 | 95 | 41 | 4 | 62 | | 6 | | 561 |
| Purple Finch | | | | | | 3 | | | | | | | 3 |
| American Goldfinch | 78 | 47 | 79 | 505 | 29 | 210 | 47 | 35 | 41 | 48 | 38 | | 1157 |
| Eastern Towhee | 13 | 3 | 9 | 54 | 4 | 4 | 12 | 11 | 4 | | 8 | | 122 |
| Chipping Sparrow | 49 | | 33 | 337 | 51 | 79 | 68 | 47 | 97 | 92 | 131 | | 984 |
| Field Sparrow | 13 | | 2 | 10 | 2 | 5 | 6 | 8 | 7 | 1 | 6 | | 60 |
| Vesper Sparrow | | | | | | | | | 5 | | | | 5 |
| Savannah Sparrow | | | | 15 | 1 | | | | | | 8 | | 24 |
| Grasshopper Sparrow | | | | 1 | | | 1 | | | | | | 2 |
| Seaside Sparrow | | | | | | | | | | | 6 | | 6 |
| Song Sparrow | 15 | 1 | 28 | 80 | 21 | 5 | 14 | 11 | 2 | | 3 | | 180 |
| Lincoln's Sparrow | | | | 1 | | | | | | | | 1 | 2 |
| Swamp Sparrow | | | | | | | | | | | 1 | | 1 |
| unidentified sparrow | | | | 6 | 20 | | | | | | 2 | | 28 |
| Yellow-breasted Chat | | | | | | | 2 | 2 | | | 2 | | 6 |
| Bobolink | | | | | 1 | 97 | 4 | 9 | 30 | 22 | 212 | | 375 |
| Eastern Meadowlark | | | | 7 | | | 1 | | | | 1 | | 9 |
| Baltimore Oriole | | | | 2 | 1 | 1 | 2 | | | | 5 | | 11 |
| Red-winged Blackbird | 4 | | 61 | 14 | 60 | 721 | 47 | 28 | 31 | 45 | 1027 | | 2038 |
| Brown-headed Cowbird | | 100 | 121 | 525 | 401 | 400 | 50 | 150 | 225 | 57 | 634 | | 2663 |
| Common Grackle | | 11 | 200 | | 3 | 1009 | 2 | 5 | 1 | 15 | 157 | | 1403 |
| unidentified blackbird | | 100 | | | | | | | | | | | 100 |
| Ovenbird | | | 5 | 6 | 3 | 2 | 3 | 3 | 2 | | 4 | | 28 |

| Species | AL | WA | CA | HO | BA | PG | CT | KE | CN | TA | DO | SO | Total |
|--------------------------------|----|----|-----|-----|----|-----|-----|-----|-----|----|----|----|-------|
| Worm-eating Warbler | | | | 1 | | | 1 | | 1 | | 1 | | 4 |
| Northern Waterthrush | | | | 1 | 1 | | 1 | 1 | 1 | | 3 | | 8 |
| Blue-winged Warbler | | | | 3 | | | | 1 | 1 | | 1 | | 6 |
| Black-and-white Warbler | 2 | 2 | 3 | 22 | 1 | 8 | 10 | 30 | 14 | 14 | 24 | | 130 |
| Prothonotary Warbler | | | | 1 | | | | | | | | | 1 |
| Tennessee Warbler | | | 1 | | 1 | 1 | | 3 | | 1 | 6 | | 13 |
| Nashville Warbler | | | 2 | 3 | | | 1 | 2 | | | | | 8 |
| Connecticut Warbler | | | | | | | | 1 | | | | | 1 |
| Kentucky Warbler | | | | | | 1 | | | | | | | 1 |
| Common Yellowthroat | 7 | | 17 | 72 | 7 | 34 | 36 | 36 | 19 | 25 | 62 | 1 | 316 |
| Hooded Warbler | | | | | | 5 | 3 | | | | 2 | | 10 |
| American Redstart | 6 | | 7 | 48 | 5 | 30 | 20 | 52 | 49 | 26 | 71 | | 314 |
| Cape May Warbler | 2 | | 2 | | | 1 | | 2 | | | 3 | | 10 |
| Northern Parula | | | 3 | 16 | 7 | 5 | 10 | 32 | 16 | 11 | 21 | | 121 |
| Magnolia Warbler | | 1 | 10 | 52 | 7 | 10 | 4 | 26 | 4 | 11 | 21 | | 146 |
| Bay-breasted Warbler | | | 1 | 2 | | 1 | 2 | 1 | | | 2 | | 9 |
| Blackburnian Warbler | | | 2 | 2 | | 1 | | 1 | 1 | 1 | 2 | | 10 |
| Yellow Warbler | | 1 | | 1 | | 2 | 1 | | 1 | 2 | 11 | | 19 |
| Chestnut-sided Warbler | 3 | | 2 | 14 | 1 | 4 | 2 | 8 | 1 | 3 | 2 | | 40 |
| Blackpoll Warbler | | | | | | 1 | 1 | | | | 2 | | 4 |
| Black-throated Blue Warbler | 1 | 3 | 2 | 11 | | | 3 | 6 | | | | | 26 |
| Palm Warbler | 1 | | 1 | 4 | 3 | 23 | 3 | 3 | 4 | 3 | 2 | | 47 |
| Pine Warbler | | 1 | 2 | 4 | 1 | 1 | 13 | 4 | 8 | 26 | 99 | 2 | 161 |
| Yellow-rumped Warbler (Myrtle) | 1 | | 2 | 1 | | | | | 6 | | | | 10 |
| Yellow-throated Warbler | | | | | | 3 | | | | | | | 3 |
| Prairie Warbler | | | | 2 | | | | 1 | | | 3 | | 6 |
| Black-throated Green Warbler | 2 | 1 | 10 | 16 | 1 | 1 | 1 | 2 | 1 | 1 | 3 | | 39 |
| Canada Warbler | | | | | | | | 2 | | | 1 | | 3 |
| Wilson's Warbler | 1 | | | 1 | | | | | | | | | 2 |
| unidentified warbler | | 5 | | 36 | 10 | | 1 | | | | 4 | | 56 |
| Summer Tanager | | | | | | 1 | 9 | | 3 | | 18 | | 31 |
| Scarlet Tanager | 9 | 4 | 4 | 9 | 2 | 6 | 8 | 15 | 2 | 3 | 4 | | 66 |
| Northern Cardinal | 61 | 21 | 136 | 521 | 71 | 169 | 154 | 206 | 138 | 51 | 91 | 6 | 1625 |
| Rose-breasted Grosbeak | 2 | 2 | 2 | 2 | 3 | | 7 | 2 | | 4 | 5 | | 29 |
| Blue Grosbeak | | | | 7 | 3 | 33 | 9 | 6 | 35 | 14 | 32 | | 139 |
| Indigo Bunting | | | 4 | 31 | 6 | 77 | 11 | 52 | 24 | 4 | 17 | | 226 |
| Dickcissel | | | | | | | 1 | | | | 1 | | 2 |



Dovekie field sketch by Diane Ford

Charcoal and watercolor. Assateague Island, Worcester County, Maryland, February 2012.



Razorbill field sketch by Diane Ford

Watercolor and graphite pencil. Ocean City Inlet, Worcester County, Maryland, 15 February 2015.

MARYLAND BIRDLIFE

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Contributors should prepare manuscripts according to the following instructions.

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Tables: Tables, graphs and line drawings should be created electronically in black and white. Color should only be used when absolutely necessary for clarity.

Illustrations: Photographs or high-definition images may be accepted if necessary or desired by the author(s) to support the text. Photographs should be submitted in color. Figure numbers, as cited in the text, and figure legends should be keyed to each respective photograph.

Maryland Birdlife is published twice annually to record and encourage the study of birds in and around Maryland. *Maryland Birdlife* contains original articles, notes, and research papers primarily pertaining to Maryland and the Mid-Atlantic region. Potential topics may include geographic or temporal distribution, ecology, biology, morphology, systematics, behavior, migration, life history, as well as other biological topics. Annual bird counts also will be published. All submissions are subject to editorial review and acceptance. Articles and research papers will be peer-reviewed. Send submissions to the Editor: Eugene J. Scarpulla, 14207 Lakerun Court, Bowie, MD 20720-4861, ejscarp@comcast.net.



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